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Annex No. 5

JAN 8 1980

OSTA-1 Payload Operations Control Center Annex

N80-71638

(NASA-TM-80912) PAYLOAD INTEGRATION PLAN PROGRAM FOR STS. OSTA-1 PAYLCAD OPERATIONS CONTROL CENTER ANNEX Final Report (NASA) 127 P

Unclas
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Final
November 15, 1979

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Lyndon B. Johnson Space Center
Houston, Texas

REVISIONS

Rev. ltr.	Change number	Description	Date
Prelim	----		03/30/79
Final	----	By Authority of R. Moke/J. Plesums	11/15/79

CHANGE SHEET NO. 1 FOR

OSTA-1 PAYLOAD DATA PACKAGE ANNEX

MAY 23, 1980

CHANGE INSTRUCTIONS

1. Remove the following listed page and replace it with the page attached to this change sheet.

Page	CR/D No.
9/10 (Drawing)	- - -

Note: A black bar in the right hand margin indicates the page has been changed.

2. Sign and date as indicated below and place this page behind the enclosed DOCUMENT REVISION log.

_____ _____

Signature of person incorporating changes in the document — Date

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OSTA-1 PAYLOAD OPERATIONS CONTROL CENTER ANNEX

LIST OF EFFECTIVE PAGES

PRELIMINARY . . .03/30/79
FINAL 11/15/79

THE CURRENT STATUS OF THE DOCUMENT CHANGE PAGES IS AS SHOWN BELOW:

PAGE	DATE
ALL PAGES ISSUED	11/15/79

PAYLOAD OPERATIONS CONTROL CENTER ANNEX

OFFICE OF SPACE AND TERRESTRIAL APPLICATIONS

PAYLOAD (OSTA-1)

FINAL

APPROVED BY:

Richard A. Moke 12/10/79

R. Moke
Payload Manager

Janis Plesums 12/10/79

J. Plesums
Annex Book Manager

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Lyndon B. Johnson Space Center
Houston, Texas

November 15, 1979

PREFACE

This document contains the basic payload data for the MCC configuration on the OSTA-1 payload. Sections 1 through 10 comprise the MCC Level D configuration (data pack), section 11 contains the collection of Ground Statement of Requirements (GSR's) for additional Level A, B, and C configuration, and section 12 contains a description of user-supplied ground support equipment. This document is issued as an annex to the Payload Integration Plan (PIP), JSC-14015.

All data presented in this annex have been supplied and verified by the payload user and his staff. Corrections and updates will be made as scheduled via the PIP.

Comments and/or corrections to these data should be directed to Janis Plesums, (713) 483-2845, code CH63, NASA JSC.

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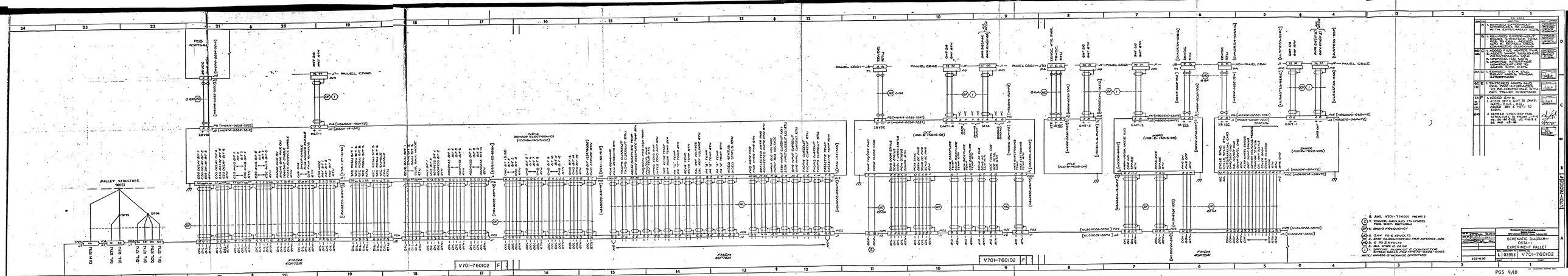


1. ANI: V701-TT4001 (NLW1)
2. POWER: DATA/ID: 15 USED FOR: DOM RETURN
3. RADIO FREQUENCY
4. 3.3V: 70 ≤ 85 VOLTS
5. 5.0V CONSUMPTION PER MF0004-020
6. 0 TO 5 VOLTS
7. ALL WIRE IS 20 GA
8. SPECIAL PURPOSE 2 CONDUCTOR
9. SPECIAL PURPOSE 4 CONDUCTOR
NOTE: UNLESS OTHERWISE SPECIFIED

REV	DESCRIPTION	ENGINEER
A	1. REVISED SCHEMATIC TO AGREE WITH SATELLITE 1025.	
B	1. REVISED SCHEMATIC TO AGREE WITH SATELLITE 1026. 2. ADDED SPARE CONNECTIONS.	
BC	1. ADDED FILE HEATER PWR. 2. ADDED THRUST VECTOR ACS. 3. ADDED SPARE CONNECTIONS. 4. UPDATED HDR NAMES. 5. UPDATED INTERFACE DESCRIPTIONS. 6. UPDATED WIRE SIZES.	
BD	1. REVISED TO A SPACE QUALIFIED SYSTEM.	
BE	1. SWITCHED MAIN AND BACK UP INTERFACE. 2. ADDED SPARE CONNECTIONS WITH SPT PALLET INTERFACE.	
BF	1. ADDED GW'S. 2. ADDED SPT-1 SAT TO SHIF. ADDED TELS, ETC. 3. CHANGED 28V & PATH TO 32GA.	
BG	1. REVISED CIRCUITRY PER STRUCTURE TO PANEL // PIN ASSIGNMENTS. 2. ADD SPT-2.	

DRAWN	DATE	
CHECKED	DATE	
ENGINEER	DATE	
PROJECT ENGINEER	DATE	

SCHEMATIC DIAGRAM - OSTA-1 EXPERIMENT PALLET		
SIZE	CAGE CODE	DRAWING NO.
D	83953	V701-760102
SCALE		SHEET
352-630		

PGS 9/10

SECTION 1
DATA PACK DESCRIPTION

This data pack document details configuration data for the JSC MCC display and control facilities in support of the STS-2 payload operations. The requirements stated in each of the data pack sections will be submitted to the Ground Data Systems Division (GDSD) for implementation.

NOTE: Detailed procedures for operating the Payload Operations Control Center (POCC) facilities configured in this document will be provided in various training guides and console handbooks.

SECTION 2
POCC FACILITIES AND CONSOLE CONFIGURATIONS

This section contains the floor plan of the POCC area of the Mission Control Center (MCC) indicating major facilities and consoles with designated positions. Each console contains voice communications, TV monitor display capability, event indicator modules, and unique capabilities as indicated. Also presented in this section are detailed configurations of the POCC consoles.

Listed below are explanatory notes found in the floor plan:

OH - Overhead TV monitor

OTV - Opaque TV

VR - Analog/event video recorder (17-pen)

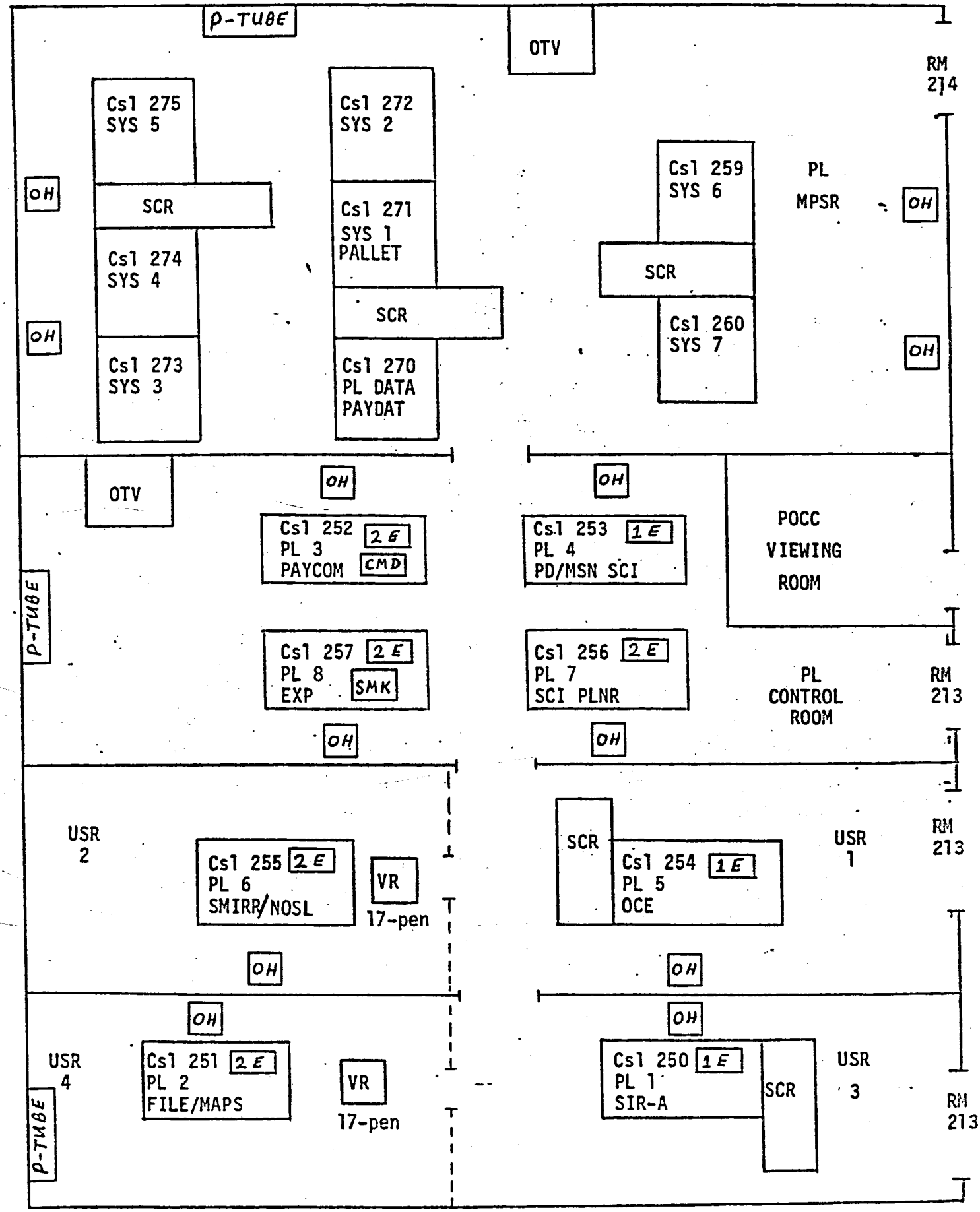
SCR - Analog/event stripchart recorder (10-pen)

E - Event indicator module (36-event)

SMK - Summary message enable keyboard

CMD - Command modules

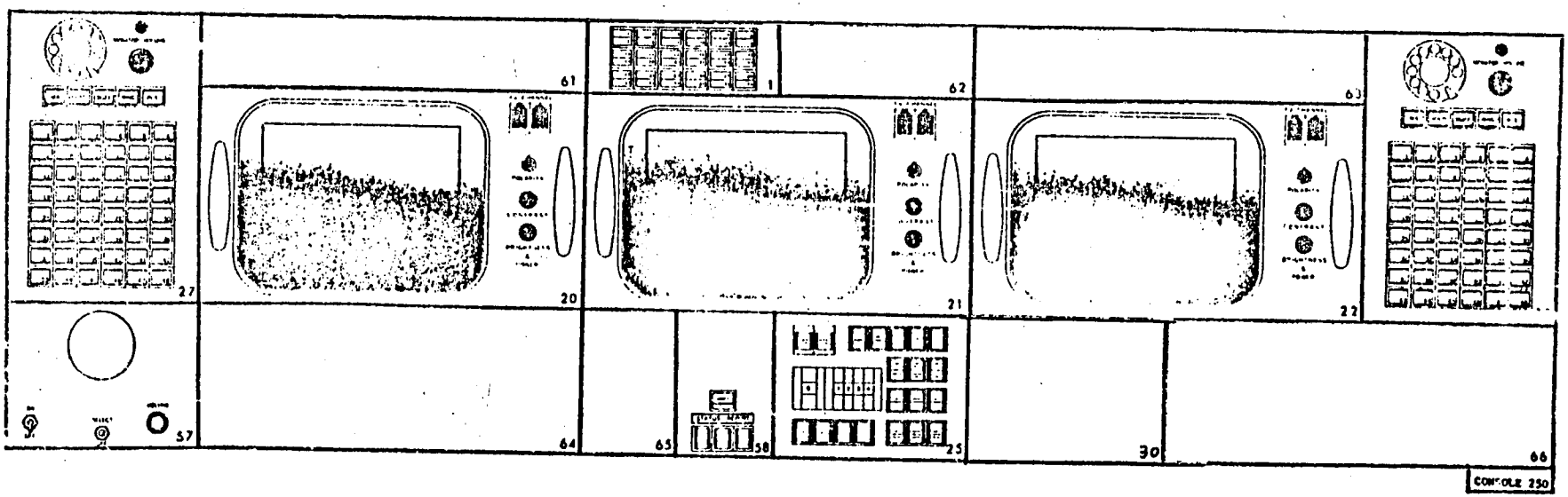
PAYLOAD MPSR AND POCC (STS-2)



6-30-79

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK4A	
27	VOICE COMM POSITION-2260	V48	
28	VOICE COMM POSITION-2261	V48	
30	BLANK PANEL	D11/4	

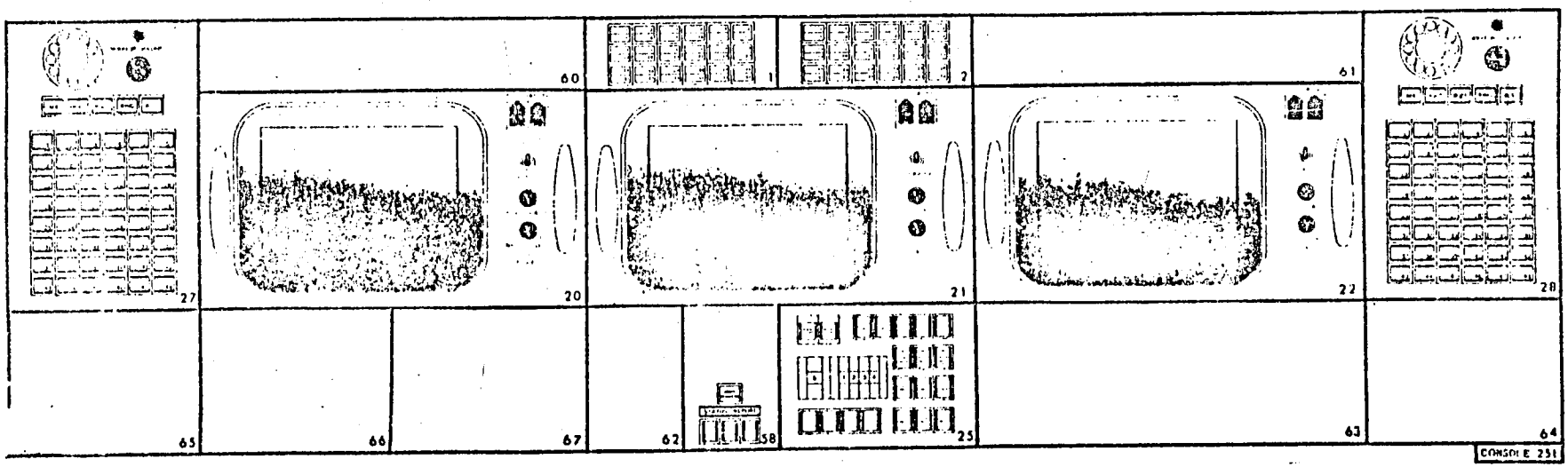
LOC	DESCRIPTION	TYPE	NOTE
57	VOICE COMM SPEAKER	SPK1	
58	STATUS REPORTING	4CE2	
61	BLANK PANEL	D11/8	
62	BLANK PANEL	D11/6	
63	BLANK PANEL	D11/8	
64	BLANK PANEL	D11/16	
65	BLANK PANEL	D11/13	
66	BLANK PANEL	D11/16	



PAYLOAD 1 (SIR-A)
CONSOLE NO. 250
ROOM NO. 213

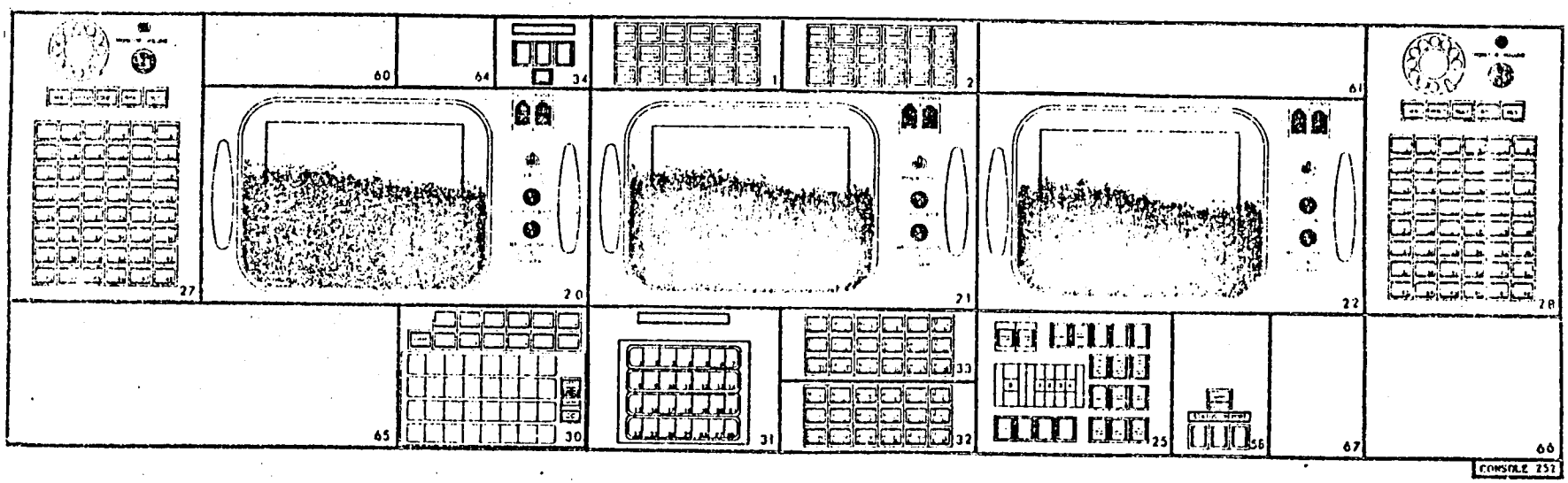
LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
02	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK3A	
27	VOICE COMM POSITION-2262	V48---	
28	VOICE COMM POSITION-2263	V48---	

LOC	DESCRIPTION	TYPE	NOTE
58	STATUS REPORT	4CE2	
60	BLANK PANEL	D11/8	
61	BLANK PANEL	D11/8	
62	BLANK PANEL	D11/13	
63	BLANK PANEL	D11/16	
64	BLANK PANEL	D11/14	
65	BLANK PANEL	D11/14	
66	BLANK PANEL	D11/14	
67	BLANK PANEL	D11/14	



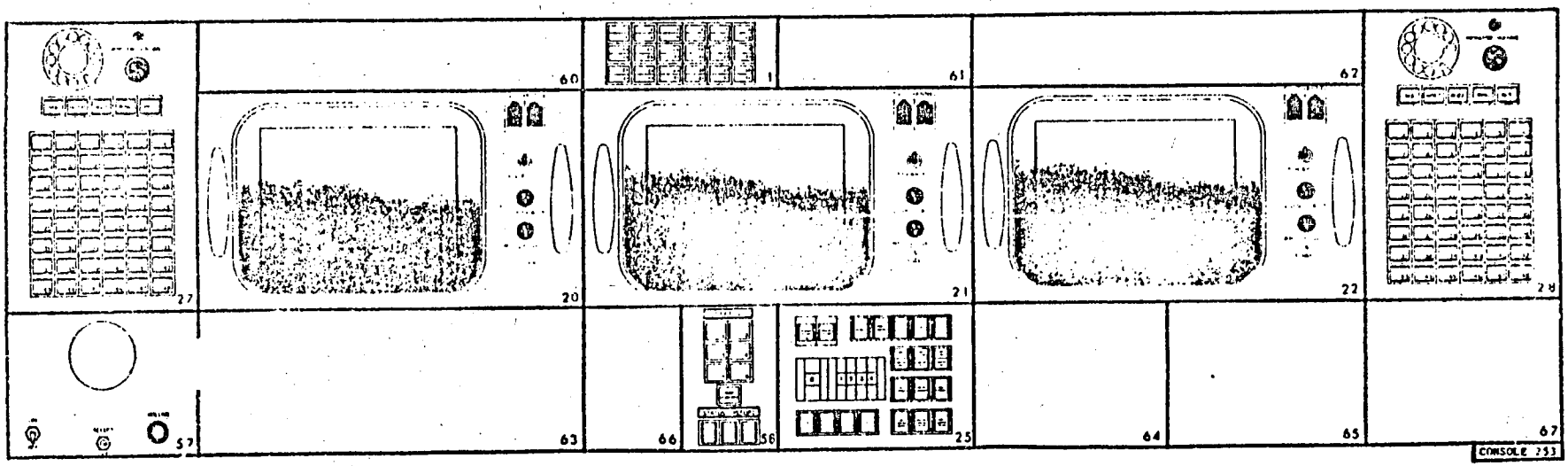
PAYLOAD 2 (FILE/MAPS)
CONSOLE NO. 251
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
02	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK3A	
27	VOICE COMM POSITION-2264	V48	
28	VOICE COMM POSITION-2265	V48	
30	MULTIPLE COMMAND MODULE	DRK4	
31	DIGITAL READOUT MODULE	28RO1	
32	SWITCH MODULE	18CMD	
33	SWITCH MODULE	18CMD	
34	FUNCTION CODE SELECT	4C1	
58	STATUS REPORT	4CE2	
60	BLANK PANEL	D11/6	
61	BLANK PANEL	D11/8	
64	BLANK PANEL	D11/5	
65	BLANK PANEL	D11/16	
66	BLANK PANEL	D11/14	
67	BLANK PANEL	D11/13	



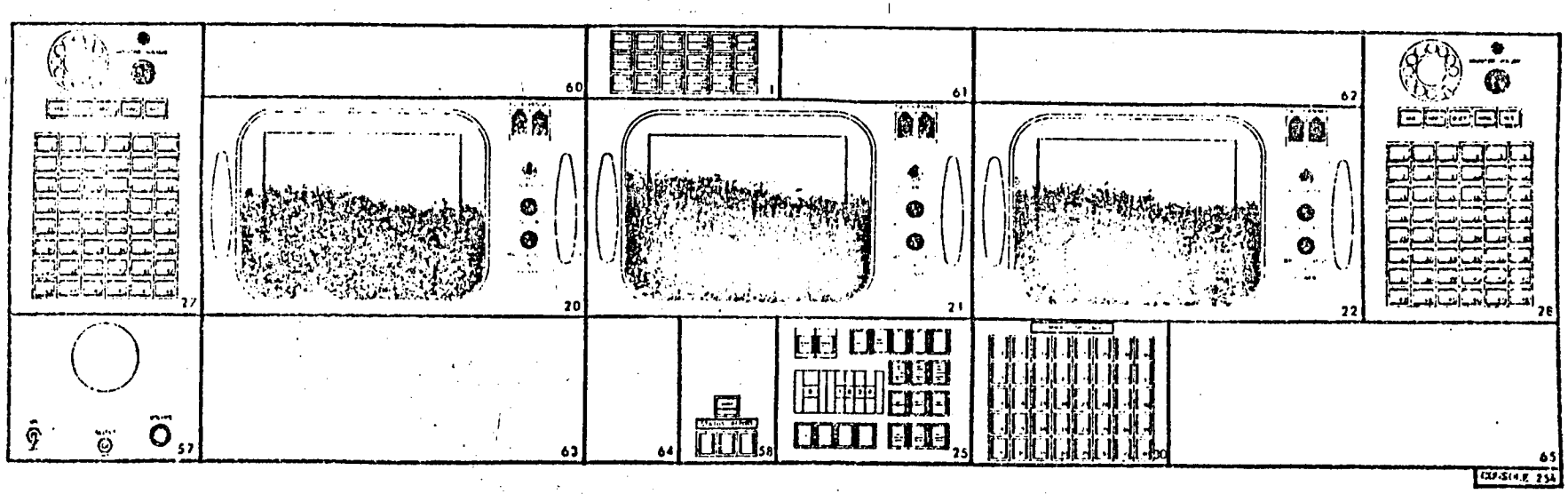
PAYLOAD 3 (PAYCOM)
CONSOLE NO. 252
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK4A	
27	VOICE COMM POSITION-2266	V48	
28	VOICE COMM POSITION-2267	V48	
57	VOICE COMM SPEAKER	SPK1	
58	STATUS/STATUS REPORT	10EC2	
60	BLANK PANEL	D11/8	
61	BLANK PANEL	D11/6	
62	BLANK PANEL	D11/8	
63	BLANK PANEL	D11/16	
64	BLANK PANEL	D11/14	
65	BLANK PANEL	D11/14	
66	BLANK PANEL	D11/13	
67	BLANK PANEL	D11/14	



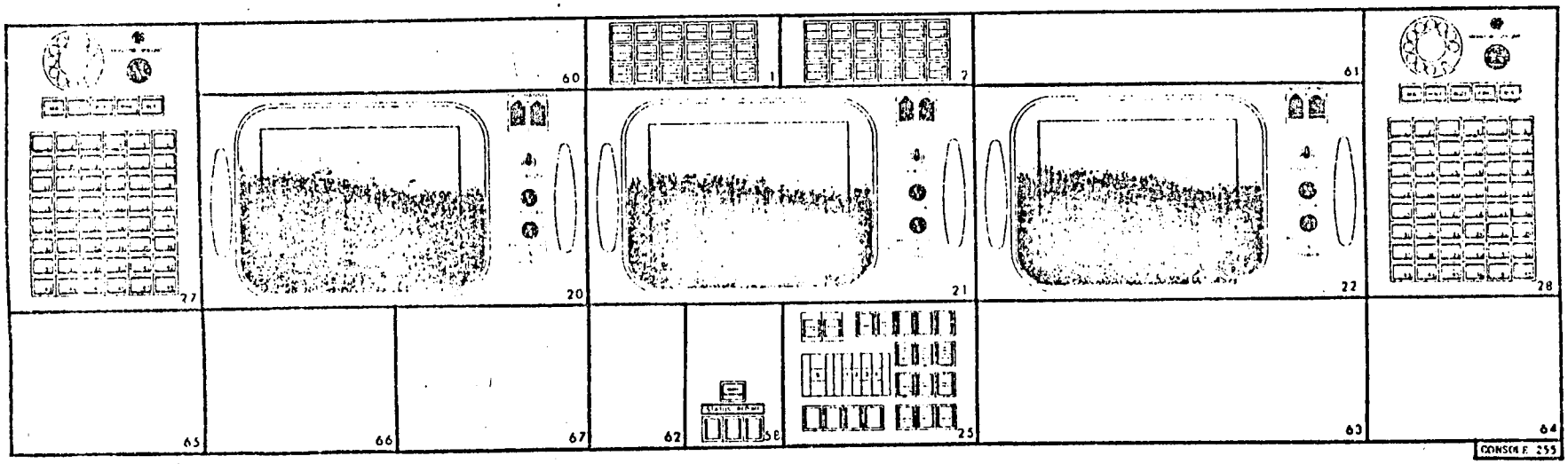
PAYLOAD 4 (PD/MSN SCI)
CONSOLE NO. 253
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK3A	
27	VOICE COMM POSITION-2268	V48	
28	VOICE COMM POSITION-2269	V48	
30	SUMMARY MSG ENABLE KBRD	SMEK2	INACT
57	VOICE COMM SPEAKER	SPK1	
58	STATUS REPORT	4CE2	
60	BLANK PANEL	D11/8	
61	BLANK PANEL	D11/6	
62	BLANK PANEL	D11/3	
63	BLANK PANEL	D11/16	
64	BLANK PANEL	D11/13	
65	BLANK PANEL	D11/16	



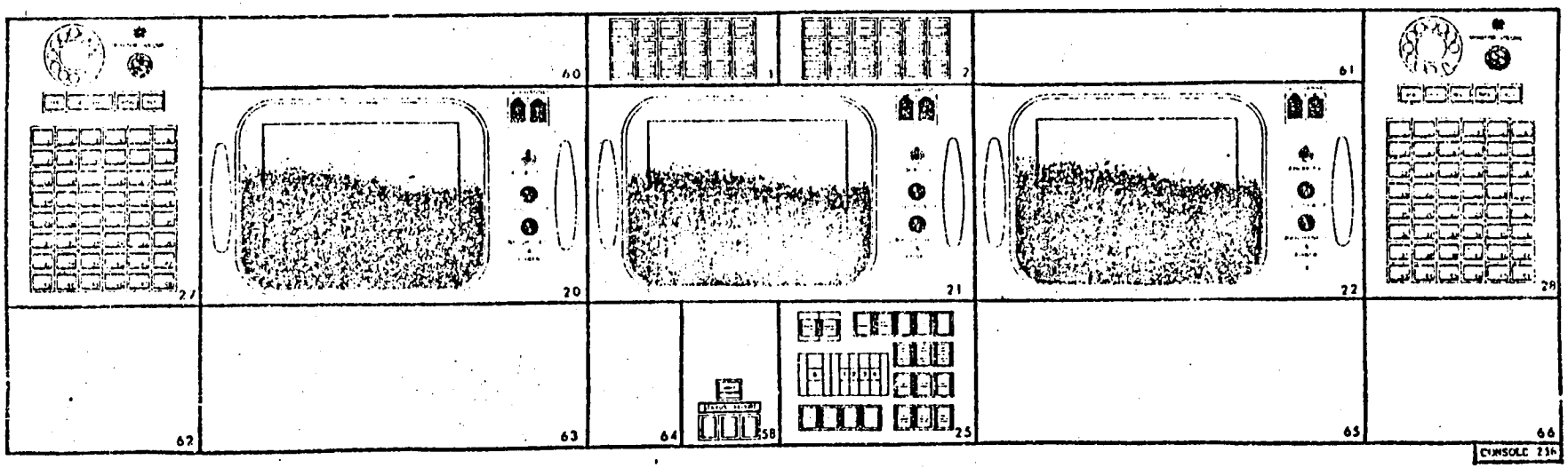
PAYLOAD 5 (OCE)
CONSOLE NO. 254
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
02	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK3A	
27	VOICE COMM POSITION-2270	V48---	
28	VOICE COMM POSITION-2271	V48---	
58	STATUS REPORT	4CE2	
60	BLANK PANEL	D11/8	
61	BLANK PANEL	D11/8	
62	BLANK PANEL	D11/13	
63	BLANK PANEL	D11/16	
64	BLANK PANEL	D11/14	
65	BLANK PANEL	D11/14	
66	BLANK PANEL	D11/14	
67	BLANK PANEL	D11/14	



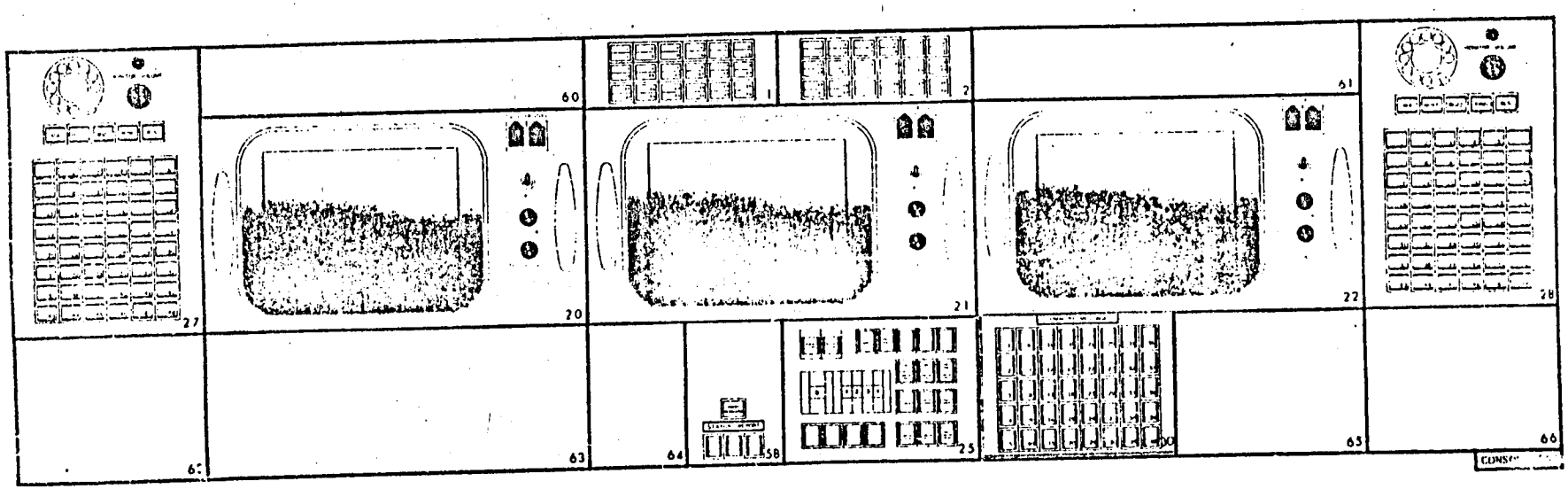
PAYLOAD 6 (SMIRR/NOSL)
CONSOLE NO. 255
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE	LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E		58	STATUS REPORT	4CE2	
02	EVENT INDICATOR	36E		60	BLANK PANEL	D11/8	
20	TV MONITOR 14 PRECISION	M9		61	BLANK PANEL	D11/8	
21	TV MONITOR 14 PRECISION	M9		62	BLANK PANEL	D11/14	
22	TV MONITOR 14 PRECISION	M9		63	BLANK PANEL	D11/16	
25	MANUAL SELECT KEYBOARD	MSK3A		64	BLANK PANEL	D11/13	
27	VOICE COMM POSITION-2272	V48		65	BLANK PANEL	D11/16	
28	VOICE COMM POSITION-2273	V48		66	BLANK PANEL	D11/14	



PAYLOAD 7 (SCI PLNR)
CONSOLE NO. 256
ROOM NO. 213

LOC	DESCRIPTION	TYPE	NOTE
01	EVENT INDICATOR	36E	
02	EVENT INDICATOR	36E	
20	TV MONITOR 14 PRECISION	M9	
21	TV MONITOR 14 PRECISION	M9	
22	TV MONITOR 14 PRECISION	M9	
25	MANUAL SELECT KEYBOARD	MSK3A	
27	VOICE COMM POSITION-2274	V48	
28	VOICE COMM POSITION-2275	V48	
30	SUMMARY MSG ENABLE KBRD	SMEK2	
58	STATUS REPORT	4CE2	
60	BLANK PANEL	D11/8	
61	BLANK PANEL	D11/8	
62	BLANK PANEL	D11/14	
63	BLANK PANEL	D11/16	
64	BLANK PANEL	D11/13	
65	BLANK PANEL	D11/16	
66	BLANK PANEL	D11/14	



PAYLOAD 8 (EXPERIMENTS)
CONSOLE NO. 257
ROOM NO. 213

SECTION 3
CONSOLE INITIALIZATION

A Mission Control Center console can be initialized for real-time or simulation support, with live, simulated, or playback data. This section specifies the data type and the support mode in which the POCC consoles are to be initiated.

02-15-77
MCC CONFIGURATION CONTROL

OFT TEST DATA BASE
DATA PACK ACRONYM CH6/PAYLOADS

CONSOLE INITIALIZATION FORM

CONSOLE NUMBER	INITIALIZATION FLIGHT	INITIALIZATION DATA TYPE	
250	002	LIVE DATA	SIR-A
251			MAPS/FILE
252			PAYLOAD CMD
253			POCC DIR/MSN SCI
254			OCE
255			SMIRR/NOSL
256			SCIENCE PLNR
257	002	LIVE DATA	EXP

SECTION 4
EVENT MODULE

4.1 INITIALIZATION

The format for each event module is variable and can be driven with various types of data (i.e., real-time, playback, simulation). Section 4.1 specifies the format, the data type, and the mode for each of the POCC console event modules.

NOTE: Each module is initiated as indicated; different formats may be selected in real-time by the console operator.

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENT INPUT FORM EXPLANATION:

DATA PACK ACRONYM	Eg... GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...
CONSOLE NUMBER -	Enter the Console number.
MODULE NUMBER -	Enter the module location designation number. This number will always be from '01' thru '19' for a variable event module.
FORMAT NUMBER -	Enter the format number of the 'variable event format' that is required to initialize the variable event module.
DATA TYPE -	Enter the type of data required to drive the variable event format that has been designated in the 'FORMAT NUMBER' entry. Data Types: REALTIME, SIMULATION, PLAYBACK 1, PLAYBACK 2
FLIGHT -	Enter the Flight ID required for this module upon initialization.

Note: Each Variable Event Module may be initialized to a different flight. They may be selected (via MSK) to a different flight in real-time.

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
250	01	520	LIVE	002
	02			
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CHL/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
251	01	521	LIVE	002
	02	530	LIVE	002
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
252	01	530	LIVE	002
	02	545	LIVE	002
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
253	01	530	LIVE	002
	02			
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
254	01	522	LIVE	002
	02			
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CM6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
255	01	523	LIVE	002
	02	530	LIVE	002
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
256	01	530	LIVE	002
	02	545	LIVE	002
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/ PAYLOADS

VARIABLE EVENT MODULE INITIALIZATION REQUIREMENTS INPUT FORM

CONSOLE NUMBER	MODULE NUMBER	FORMAT NUMBER	DATA TYPE	FLIGHT NUMBER
257	01	530	LIVE	002
	02	545	LIVE	002
	03			
	04			
	05			
	06			
	07			
	08			
	09			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			

4.2 FORMAT DEFINITION

Section 4.2 defines the event module formats to be used during operations support. Overlays are made for each format and are provided to each console as required.

- Event Light Color Conventions

Red - Analogs or critical events that are limit-sensed and annunciated onboard (FDA or C&W)

Amber - (1) Analogs or events that are limit-sensed on the ground only

(2) Off-nominal or out-of-configuration event

Green - Nominal configuration

White - Nominal configuration where flip-flop might be required in conjunction with green

Blue - Ground processing or configuration type events, e.g., inhibit ground limit sensing, initiate plots, or special computation

VARIABLE EVENT FORMAT DETAIL INPUT FORM EXPLANATION:

DATA PACK ACRONYM - Eg... GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...

EVENT FORMAT NUMBER - When the DDD control mode is selected (MSK), the four MSK thumbwheels will represent the event format and console-module number. The left three thumbwheels will represent the event format number.

FLIGHT - Flight ID.

DATA TYPE - REAL TIME, SIMULATION, PLAYBACK 1, PLAYBACK 2

OVERLAY TYPE - TYPE A = 36-EVENT INDICATOR OVERLAY FOR USE ON A 36-EVENT INDICATOR MODULE.

TYPE B = 36-EVENT INDICATOR OVERLAY FOR USE ON THE UPPER OR LOWER HALF OF A 72-EVENT INDICATOR MODULE.

NUMBER OF COPIES - Specify the number of copies of physical overlays required.

OVERLAY TITLE - If applicable, specify a name for this overlay.

INDICATOR - This number relates to the physical location (and software identifier) of each 'window/indicator' of the 36-indicator format.

36-EVENT MODULE (TYPE-A)

01	02	03	04	05	06
07	08	09	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

72-EVENT MODULE (TYPE-B)

01	02	03	04	05	06	07	08	09
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	25	27
28	29	30	31	32	33	34	35	36

COLOR - Colors available are:

RED, GREEN, AMBER, BLUE & WHITE (R,G,A,B & W)

MEASUREMENT NUMBER - Enter the valid (MCC-H computer available) measurement number required displayed.

LOGIC - Enter the display logic required:

Straight, Reverse, Critical , Latched

LABEL - Enter the label required. Labels are limited to 2 Lines/9 Characters each (Space=Character).

VARIABLE EVENT MODULE

P03X1055Y SIR-A K8 G SIRAX0151 RAD PWR G	SIRAX0152 RAD OP PW G SIRAX0153 XMTR G	SIRAX0158 T ADV G SIRAX0173 CAL OFF A	SIRAX0172 STC G	SIRAX0154 O/R OPR G SIRAX0155 O/R SWEEP G	SIRAX0156 O/R ADV G SIRAX0157 FILM MTN G
SIRAT0226 FILM TEMP R SIRAT0228 O/R TEMP A	SIRAT0222 RCVR TEMP A SIRAT0221 F/R TEMP A	SIRAT0223 PA A TEMP A SIRAT0224 PA B TEMP A	SIRAT0225 PA C TEMP A SIRAT0227 BASE TEMP A		OCE LIMITS B
SIRAE0201 FWD XMTR R SIRAE0202 RFL XMTR R	SIRAC0209 STBY AMPS R SIRAC0210 OPR AMPS R	SIRAC0205 TXOP9 A SIRAC0207 TXOP13 A	SIRAC0208 TXOP14 A SIRAV0217 IN BUS V A	SIRAV0216 CAL REF V A	SIR-A 1 LIMITS B SIR-A 2 LIMITS B

FORMAT NUMBER 520 TITLE SIR-A

CONSOLE NAME PL-1 CONSOLE NUMBER 250

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM

03-25-77
MCC CONFIGURATION CONTROL

DATA PACK ACRONYM CH6/PAYLOADS

EVENT FORMAT NUMBER 520 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE ____ NUMBER OF COPIES 10

OVERLAY TITLE SIR-A

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	G	P03X1055Y		P03X1055Y • SIR-A K8
02	G	P20X0152Y		SIRAX0152 • RAD OP PW
03	G	P20X0158Y		SIRAX0158 • T ADV
04	G	P20X0172Y		SIRAX0172 • STC
05	G	P20X0154Y		SIRAX0154 • O/R OPR
06	G	P20X0156Y		SIRAX0156 • O/R ADV
07	G	P20X0151Y		SIRAX0151 • RAD PWR
08	G	P20X0153Y		SIRAX0153 • XMTR
09	A	P20X0173Y	R	SIRAX0173 • CAL OFF
10				
11	G	P20X0155Y		SIRAX0155 • O/R SWEEP
12	G	P20X0157Y		SIRAX0157 • FILM MTN
13	B	P20T0226V		SIRAT0226 • FILM TEMP
14	A	P20T0222V		SIRAT0222 • RCVR TEMP
15	A	P20T0223V		SIRAT0223 • PA A TEMP
16	A	P20T0225V		SIRAT0225 • PA C TEMP
17				
18				
19	A	P20T0228V		SIRAT0228 • O/R TEMP
20	A	P20T0221V		SIRAT0221 • F/R TEMP
21	A	P20T0224V		SIRAT0224 • PA B TEMP
22	A	P20T0227V		SIRAT0227 • BASE TEMP
23				
24	B			OCE • LIMITS
25	B	P20E0201V		SIRAE0201 • FWD XMTR
26	B	P20C0209V		SIRAC0209 • STBY AMPS
27	A	P20C0205V		SIRAC0205 • TXOP9
28	A	P20C0208V		SIRAC0208 • TXOP14
29	A	P20V0216V		SIRAV0216 • CAL REF V
30	B			SIR-A 2 • LIMITS
31	B	P20E0202V		SIRAE0202 • RFL XMTR
32	B	P20C0210V		SIRAC0210 • OPR AMPS
33	A	P20C0207V		SIRAC0207 • TXOP13
34	A	P20V0217V		SIRAV0217 • IN BUS V
35				
36	B			SIR-A 2 • LIMITS

VARIABLE EVENT MODULE

	MAPSX0061 G OPERATE	P03X1043Y G FILE K5			
P03X1046Y G MAPS K2	MAPSX0060 B WARM/BAL	P03X1058Y G HTR K6			

FORMAT NUMBER 521 TITLE FILE/MAPS

CONSOLE NAME PL-2 CONSOLE NUMBER 251

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM

03-25-77
MCC CONFIGURATION CONTROL

DATA PACK ACRONYM CHG/PAYLOADS

EVENT FORMAT NUMBER 521 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE _____ NUMBER OF COPIES 10

OVERLAY TITLE FILE/MAPS

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	-			
02	-			
03	-			
04	-			
05	-			
06	-			
07	-			
08	-			
09	-			
10	-			
11	-			
12	-			
13	-			
14	-			
15	-			
16	-			
17	-			
18	-			
19	-			
20	-			
21	-			
22	-			
23	-			
24	-			
25	-			
26	G	P20X0061Y		MAPSX0061 • OPERATE
27	G	P03X1043Y		P03X1043Y • FILE K5
28	-			
29	-			
30	-			
31	G	P03X1046Y		P03X1046Y • MAPS K2
32	B	P20X0060Y		MAPSX0060 • WARM/BAL
33	G	P03X1058Y		P03X1058Y • HTR K6
34	-			
35	-			
36	-			

VARIABLE EVENT MODULE

P03X1049Y G OCE K3	OCE X0082 G SCAN AC	OCE X0077 G VIDEO	OCE X0076 G SCAN	OCE C0097 R TOT CUR	OCE C0096 R SCAN CUR
OCE X0080 G DATA DC	OCE X0081 G SCAN DC	OCE X0078 G PCM	OCE X0079 G PCM SYNC	OCE X0075 G DOOR OPEN	OCE T0092 A ELEC TEMP
					OCE T0090 A SCAN BASE
					OCE T0091 A MEA BASE
OCE B LIMITS			RCD SPD1 G OCE 6	RCD A G OCE	RECORDER A STOP
			RCD SPD2 G SMIRR 38	RCD B G SMIRR	TAPE G MOTION

FORMAT NUMBER 522 TITLE OCE

CONSOLE NAME PL-5 CONSOLE NUMBER 254

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM

03-25-77
MCC CONFIGURATION CONTROL

DATA PACK ACRONYM CHL/PAYLOADS

EVENT FORMAT NUMBER 522 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE _____ NUMBER OF COPIES 10

OVERLAY TITLE OCE

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	G	P03X1049Y		P03X1049Y • OCE K3
02	G	P20X0082Y		OCE X0082 • SCAN AC
03	G	P20X0077Y		OCE X0077 • VIDEO
04	G	P20X0076Y		OCE X0076 • SCAN
05	R	P20C0097V		OCE C0097 • TOT CUR
06	R	P20C0096V		OCE C0096 • SCAN CUR
07	G	P20X0080Y		OCE X0080 • DATA DC
08	G	P20X0081Y		OCE X0081 • SCAN DC
09	G	P20X0078Y		OCE X0078 • PCM
10	G	P20X0079Y		OCE X0079 • PCM SYNC
11	G	P20X0075Y		OCE X0075 • DOOR OPEN
12	A	P20T0092V		OCE T0092 • ELEC TEMP
13	–			
14	–			
15	–			
16	–			
17	–			
18	A	P20T0090V		OCE T0090 • SCAN BASE
19	–			
20	–			
21	–			
22	–			
23	–			
24	A	P20T0091V		OCE T0091 • MEA BASE
25	–			
26	–			
27	–			
28	G	M33I0309E		RCD SPD 1 • OCE 6
29	G	M18I0309E		RCD A • OCE
30	A	M24I0309E		RECORDER • STOP
31	B			OCE • LIMITS
32	–			
33	–			
34	G	M34I0309E		RCD SPD 2 • SMIRR 38
35	G	M21I0309E		RCD B • SMIRR
36	G	V75X2723E		TAPE • MOTION

VARIABLE EVENT MODULE

P03X1052Y G K4 SMIRR	SMIRX0118 G COVER OP	SMIRX0120 G OPERATE	SMIRX0115 G FILT WHL	SMIRX0122 G CAMERA	
SMIRX0117 G CAL	SMIRX0119 A COVER CL	SMIRX0120 A STANDBY	SMIRX0116 G DET TEMP	SMIRX0121 G CAM HOU P	
SMIRK0105 G AUTOMATIC			RCD SPD 1 G 6 OCE	RCDA G OCE	RECORDER A STOP
			RCD SPD 2 G 3B SMIRR	RCD B G SMIRR	TAPE G MOTION

FORMAT NUMBER 523 TITLE SMIRR

CONSOLE NAME PL-6 CONSOLE NUMBER 255

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM

03-25-77
MCC CONFIGURATION CONTROL

DATA PACK ACRONYM CHL/PAYLOADS

EVENT FORMAT NUMBER 523 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE _____ NUMBER OF COPIES 10

OVERLAY TITLE SMIRR

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	-			
02	-			
03	-			
04	-			
05	-			
06	-			
07	-			
08	-			
09	-			
10	-			
11	-			
12	-			
13	G	P03X1052Y		P03X1052Y • KY SMIRR
14	G	P20X0118Y		SMIRX0118 • COVER OP
15	G	P20X0120Y		SMIRX0120 • OPERATE
16	G	P20X0115Y		SMIRX0115 • FILT WHL
17	G	P20X0122Y		SMIRX0122 • CAMERA
18	-			
19	G	P20X0117Y		SMIRX0117 • CAL
20	A	P20X0119Y		SMIRX0119 • COVER CL
21	A	P20X0120Y	R	SMIR X0120 • STANDBY
22	G	P20X0116Y		SMIRX0116 • DET TEMP
23	G	P20X0121Y		SMIRX0121 • CAM HOU P
24	-			
25	G	P20K0105Y		SMIRK0105 • AUTOMATIC
26	-			
27	-			
28	G	M33I0309E		RCD SPD 1 • OCE 6
29	G	M18I0309E		RCD A • OCE
30	A	M24I0309E		RECORDER • STOP
31	-			
32	-			
33	-			
34	G	M34I0309E		RCD SPD 2 • SMIRR 38
35	G	M21I0309E		RCD B • SMIRR
36	G	V75X2723E		TAPE • MOTION

VARIABLE EVENT MODULE

P03X1049Y G OCE K3	OCE X0082 G SCAN AC	OCE X0077 G VIDEO	OCE X0076 G SCAN	OCE C0097 R TOT CUR	OCE C0096 R SCAN CUR
OCE X0080 G DATA DC	OCE X0081 G SCAN DC	OCE X0078 G PCM	OCE X0079 G PCM SYNC	OCE X0075 G DOOR OPEN	OCE T0092 A ELEC TEMP
P03X1052Y G SMIRR K4	SMIR X0118 G COVER OP	SMIR X0120 G OPERATE	SMIR X0115 G FILT WHL	SMIR X0122 G CAMERA	OCE T0090 A SCAN BASE
SMIR X0117 G CAL	SMIR X0119 A COVER CL	SMIR X0120 A STANDBY	SMIR X0116 G DET TEMP	SMIR X0121 G CAM HOU P	OCE T0091 A MEA BASE
SMIRK0105 G AUTOMATIC	MAPS X0060 G OPERATE	P03X1043Y G FILE K5	RCD SPD1 G OCE G	RCDA G OCE	RECORDER A STOP
P03X1046Y G MAPS K2	MAPS X0060 A WARM/BAL	P03X1058Y G HTR K6	RCD SPD2 G SMIRR 38	RCD B G SMIRR	TAPE G MOTION

FORMAT NUMBER 530 TITLE EXPERIMENTS

CONSOLE NAME PL-8 CONSOLE NUMBER 257

03-25-77
MCC CONFIGURATION CONTROL

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

EVENT FORMAT NUMBER 530 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE _____ NUMBER OF COPIES 13

OVERLAY TITLE EXPERIMENTS

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	G	P03X1049Y		P03X1049Y • OCE K3
02	G	P20X0082Y		OCE X0082 • SCAN AC
03	G	P20X0077Y		OCE X0077 • VIDEO
04	G	P20X0076Y		OCE X0076 • SCAN
05	R	P20C0097V		OCE C0097 • TOT CUR
06	R	P20C0096V		OCE C0096 • SCAN CUR
07	G	P20X0080Y		OCE X0080 • DATA DC
08	G	P20X0081Y		OCE X0081 • SCAN DC
09	G	P20X0078Y		OCE X0078 • PCM
10	G	P20X0079Y		OCE X0079 • PCM SYNC
11	G	P20X0075Y		OCE X0075 • DOOR OPEN
12	A	P20T0092V		OCE T0092 • ELEC TEMP
13	G	P03X1052Y		P03X1052Y • SMIRR K4
14	G	P20X0118Y		SMIRX0118 • COVER OP
15	G	P20X0120Y		SMIRX0120 • OPERATE
16	G	P20X0115Y		SMIRX0115 • FILT WHL
17	G	P20X0122Y		SMIRX0122 • CAMERA
18	A	P20T0090V		OCE T0090 • SCAN BASE
19	G	P20X0117Y		SMIRX0117 • CAL
20	A	P20X0119Y		SMIAX0119 • COVER CL
21	A	P20X0120Y		SMIRX0120 • STANDBY
22	G	P20X0116Y		SMIRX0116 • DET TEMP
23	G	P20X0121Y		SMIRX0121 • CAM HDW P
24	A	P20T0091V		OCE T0091 • MEA BASE
25	G	P20K0105Y		SMIRK0105 • AUTOMATIC
26	G	P20X0061Y		MAPSX0061 • OPERATE
27	G	P03X1043Y		P03X1043Y • FILE K5
28	G	M33I0309E		RCD SPD 1 • OCE 6
29	G	M18I0309E		RCD A • OCE
30	A	M24I0309E		RECORDER • STOP
31	G	P03X1046Y		P03X1046Y • MAPS K2
32	A	P20X0060Y		MAPSX0060 • WARM/BAL
33	G	P03X1058Y		P03X1058Y • HTR K6
34	G	M34I0309E		RCD SPD 2 • SMIRR 38
35	G	M21I0309E		RCD B • SMIRR
36	G	V75X2723E		TAPE • MOTION

VARIABLE EVENT MODULE

P03X1046Y G MAPS K2	P03X1049Y G OCE K3	P03X1052Y G SMIRR K4	SIRAX0151 G RAD PWR	RCD SPD 1 G OCE 6	RCD A G OCE
MAPSX0060 G OPERATE	OCE X0080 G DATA DC	SMIRX0117 G CAL	SIRA X0158 G T ADV	RCD SPD 2 G SMIRR 38	RCD B G SMIRR
MAPSX0060 A WARM/BAL	OCE X0076 G SCAN	SMIR X0118 G COVER OP	SIRA X0152 G RAD OP PW	SIRAE0201 R FWD XMTR	RECORDER A STOP
	OCE X0075 G DOOR OPEN	SMIR X0119 A COVER CL	SIRA X0153 G XMTR	SIRAE0202 R RFL XMTR	TAPE G MOTION
P03X1043Y G FILE K5	OCE C0097 R TOT CUR	SMIRX0120 G OPERATE	SIRAX0157 G FILM MTN	SIRA C0209 R STBY AMPS	OCE B LIMITS
P03X1058Y G FILE K6	OCE C0096 R SCAN CUR	SMIRX0120 A STANDBY	SIRAT0226 R FILM TEMP	SIRA C0210 R OPR AMPS	SIR-A 1 B LIMITS

FORMAT NUMBER 545 TITLE POCC SUMMARY

CONSOLE NAME PL-4 CONSOLE NUMBER 253

03-25-77
MCC CONFIGURATION CONTROL

VARIABLE EVENT FORMAT DETAIL
OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

EVENT FORMAT NUMBER 545 FLIGHT 002 DATA TYPE RT

OVERLAY TYPE _____ NUMBER OF COPIES 13

OVERLAY TITLE POCC SUMMARY

INDICATOR	COLOR	MEASUREMENT NUMBER	LOGIC	LABEL
01	G	P03X1046Y		P03X1046Y • MAPS K2
02	G	P03X1049Y		P03X1049Y • OCE K3
03	G	P03X1052Y		P03X1052Y • SMIRR KY
04	G	P20X0151Y		SIRAX0151 • RAD PWR
05	G	M33I0309E		RCD SPD 1 • OCE 6
06	G	M18I0309E		RCD A • OCE
07	G	P20X0061Y		MAPSX0061 • OPERATE
08	G	P20X0080Y		OCE X008D • DATA DC
09	G	P20X0117Y		SMIRX0117 • CAL
10	G	P20X0158Y		SIRAX0158 • T ADV
11	G	M34I0309E		RCD SPD 2 • SMIRR 38
12	G	M21I0309E		RCD B • SMIRR
13	A	P20X0060Y		MAPSX0060 • WARM/BAL
14	G	P20X0076Y		OCE X0076 • SCAN
15	G	P20X0118Y		SMIRX0118 • COVER OP
16	G	P20X0152Y		SIRAX0152 • RAD OP PW
17	R	P20E0201V		SIRAE0201 • FWD XMTR
18	A	M24I0309E		RECORDER • STOP
19				
20	G	P20X0075Y		OCE X0075 • DOOR OPEN
21	A	P20X0119Y		SMIRX0119 • COVER CL
22	G	P20X0153Y		SIRAX0153 • XMTR
23	R	P20E0202V		SIRAE0202 • RFL XMTR
24	G	V75X2723E		TAPE • MOTION
25	G	P03X1043Y		P03X1043Y • FILE K5
26	R	P20C0097V		OCE C0097 • TOT CUR
27	G	P20X0120Y		SMIRX0120 • OPERATE
28	G	P20X0157Y		SIRAX0157 • FILM MTN
29	R	P20C0209V		SIRA C0209 • STBY AMPS
30	B			OCE • LIMITS
31	G	P03X1058Y		P03X1058Y • FILE K6
32	R	P20C0096V		OCE C0096 • SCAN CUR
33	A	P20X0120Y		SMIRX0120 • STANDBY
34	R	P20T0226V		SIRAT0226 • FILM TEMP
35	R	P20C0210V		SIRAC0210 • OPR AMPS
36	B			SIR-A 1 • LIMITS

SECTION 5
LIMIT SENSE

An analog parameter may be sensed by the ground system for upper and lower operational/critical limits. Indication that a limit-sensed parameter has reached or exceeded its normal operational or safety range may be provided by the event light and on the DTE display. The limit-sensing capability may be disabled or enabled in real time by the console operator using the Summary Message Enable Keyboard (SMEK) module.

This section lists the groups of parameters and the limits to be sensed.

LIMIT SENSE DATA INPUT FORM DEFINITION:

DATA PACK ACRONYM - Eg... GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...

MEASUREMENT NUMBER - Enter the Measurement Number of the parameter that is required limit sensed.

** A given Measurement Number may be assigned to one and only one Flight Discipline Group. All Measurement Numbers that are required limit sensed must be assigned to a Flight Discipline Group.

UNITS - Enter the Engineering Units of the parameter to be limit sensed. ACRONYM limited to 8 characters.

OPERATIONAL LIMIT LOW - Enter the Operational Low Value. Valid with or without a decimal; May be preceded by a '-' or '+' Sign; BLANK defaults to a '+' sign.

OPERATIONAL LIMIT HIGH - Enter the Operational High Value. Valid with or without a decimal; May be preceded by a '-' or '+' Sign; BLANK defaults to a '+' sign.

CRITICAL LIMIT LOW - Enter the Critical Low Value. Valid with or without a decimal; May be preceded by a '-' or '+' Sign; BLANK defaults to a '+' sign.

This 'value' is to be entered only for Set # 01 of it's Flight Discipline Group.

For a given parameter that has 'critical limits' a corresponding set of operational limits must exist.

CRITICAL LIMIT HIGH - Enter the Critical High Value. Valid with or without a decimal; May be preceded by a '-' or '+' Sign; BLANK defaults to a '+' sign.

This 'value' is to be entered only for Set # 01 of it's Flight Discipline Group.

For a given parameter that has 'critical limits' a corresponding set of operational limit must exist.

CATEGORY - Enter the applicable Category or Categories for this measurement number. (Multiple categories may be specified for a given parameter.)
The Category Numbers are from 1 thru 64.

The 'category' requirements are to be entered only for Set # 01 of it's Flight Discipline Group.

LIMIT SENSE DATA INPUT FORM DEFINITION: (CONT'D)

** THERE IS ONE "CRITICAL ONLY" CATEGORY FOR EACH FLIGHT DISCIPLINE GROUP. THEY ARE AS FOLLOWS:

BOOSTER	FDG-1	CATEGORY-1
FLIGHT COMPUTERS	FDG-2	CATEGORY-2
AVIONICS	FDG-3	CATEGORY-3
EMESB1	FDG-4	CATEGORY-4
EMESB2	FDG-5	CATEGORY-5
PROPULSION	FDG-6	CATEGORY-6
PAYLOADS	FDG-7	CATEGORY-7

FDG - Enter the Flight Discipline Group code.

FDG CODE	GROUP NAME
1	BOOSTER
2	FLIGHT COMPUTERS
3	AVIONICS
4	EMESB1
5	EMESB2
6	PROPULSION
7	PAYLOADS

M/S - Enter the appropriate code:

M = Mission Limit Sense Data
S = Simulation Limit Sense Data

SET # - Enter the limit sense set number within a given Flight Discipline Group (Maximum of 5 Sets are allowed).

** Within a Discipline, all parameters must have the same number of limit sets.

Eg.. If the 'Number of Sets' for FDG-1 = 3, then each Measurement Number of FDG-1 must have operation limits for each 'set of limits' within FDG-1.

01-15-77
MCC CONFIGURATION CONTROL

LIMIT SENSE DATA INPUT FORM
OFT TEST DATA BASE
DATA PACK ACRONYM CHL/PAYLOAD

LIMIT SENSE TABLE INPUT FORM

MEASUREMENT NUMBER	UNITS	****OPERATIONAL LIMITS **** LOW	HIGH	****CRITICAL LIMITS ******** LOW	HIGH	CATEGORY	FDG	M/S	SET #
P20E0201V	WATTS	800	1230			2	7	m	1
P20E0202V	WATTS	—	75			2	7	m	1
P20T0221V	DEGREE F	32	104			2	7	m	1
P20V0217V	VDC	25	32			2	7	m	1
P20C0209V	AMPS	1.0	1.6			2	7	m	1
P20T0226V	DEGREE F	41	95			2	7	m	1
P20C0210V	AMPS	13	25			2	7	m	1
P20V0216V	VDC	0.1	0.4			2	7	m	1
P20T0222V	DEGREE F	14	104			2	7	m	1
P20T0227V	DEGREE F	14	104			2	7	m	1
P20T0228V	DEGREE F	14	104			2	7	m	1
P20T0223V	DEGREE F	32	140			2	7	m	1
P20T0224V	DEGREE F	32	140			2	7	m	1
P20T0225V	DEGREE F	32	140			2	7	m	1
P20C0205V	AMPS	0.9	1.2			2	7	m	1
P20C0207V	AMPS	2.4	3.3			2	7	m	1

01-15-77
MCC CONFIGURATION CONTROL

LIMIT SENSE DATA INPUT FORM
OFT TEST DATA BASE
DATA PACK ACRONYM CH6/PAYLOADS

LIMIT SENSE TABLE INPUT FORM

MEASUREMENT NUMBER	UNITS	****OPERATIONAL LIMITS **** LOW	HIGH	****CRITICAL LIMITS ******** LOW	HIGH	CATEGORY	FDG	M/S	SET #
P20E0201V	WATTS	800	1230			2	7	M	2
P20E0202V	WATTS	—	75			2	7	M	2
P20T0221V	DEGREE F	32	104			2	7	M	2
P20V0217V	VDC	25	32			2	7	M	2
P20C0209V	AMPS	1.0	1.6			2	7	M	2
P20T0226V	DEGREE F	41	95			2	7	M	2
P20C0210V	AMPS	2.5	4.0			2	7	M	2
P20V0216V	VDC	0.1	0.4			2	7	M	2
P20T0222V	DEGREE F	14	104			2	7	M	2
P20T0227V	DEGREE F	14	104			2	7	M	2
P20T0228V	DEGREE F	14	104			2	7	M	2
P20T0223V	DEGREE F	32	140			2	7	M	2
P20T0224V	DEGREE F	32	140			2	7	M	2
P20T0225V	DEGREE F	32	140			2	7	M	2
P20C0205V	AMPS	0.9	1.2			2	7	M	2
P20C0207V	AMPS	2.4	3.3			2	7	M	2

01-15-77
MCC CONFIGURATION CONTROL

LIMIT SENSE DATA INPUT FORM
OFT TEST DATA BASE
DATA PACK ACRONYM CH6/PAYLOADS

LIMIT SENSE TABLE INPUT FORM

MEASUREMENT NUMBER	UNITS	****OPERATIONAL LIMITS **** LOW	HIGH	****CRITICAL LIMITS ******** LOW	HIGH	CATEGORY	FDG	M/S	SET #
P20T0090V	DEGREE F	64.4	82.4			3	7	M	1
P20T0091V	DEGREE F	64.4	82.4			3	7	M	1
P20T0092V	DEGREE F	64.4	82.4			3	7	M	1
P20C0096V	AMPS	0.25	0.35			3	7	M	1
P20C0097V	AMPS	5.3	7.3			3	7	M	1
P20C0208V	AMPS	2.6	3.6			2	7	M	1
P20C0208V	AMPS	2.6	3.6			2	7	M	2

SECTION 6
ANALOG/EVENT RECORDERS

6.1 RECORDER CONTROL

A Strip Chart Recorder (SCR) or Video Recorder must be configured by the console operator. Console inputs are made by the operator in real time to accomplish recorder configuration. This section specifies the controlling console for each recorder.

CONSOLE-MODULE-THUMBWHEEL POSITION TO RECORDER FORM DEFINITION:

A GIVEN RECORDER MAY HAVE ONLY "ONE" CONSOLE/MSK/THUMBWHEEL CONTROL ASSIGNMENT.

DATA PACK ACRONYM -	Eg...GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...
CONSOLE NUMBER -	Enter the Identification number of the console that is to have the recorder selection capability specified on this form.
MODULE NUMBER -	Enter the Module location designation of the MSK that is to used for recorder selection.
RECORDER THUMBWHEEL POSITION	Identifies the Recorder Select Thumbwheel Positions.
RECORDER NUMBER -	Enter the Recorder ID.
RECORDER TYPE -	Enter the Recorder Type. (10-PEN SCR -- 8 ANALOG/2 TIMING) (17-PEN A/E RCDR -- 8 ANALOG/7 EVENTS/2 TIMING) (100-PEN ER -- 96 EVENTS/4 TIMING) (150-PEN ER -- 144 EVENTS/6 TIMING)

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CHG/PAYLOADS

CONSOLE-MODULE-THUMBWHEEL POSITION TO RECORDER FORM

CONSOLE NUMBER	MODULE NUMBER	RECORDER SELECT THUMBWHEEL POSITION	RECORDER NUMBER	RECORDER TYPE
250	25	01		10-PEN SCR
		02		
		03		
		04		
		05		
		06		
		07		
		08		
		09		
		10		

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CHG/PAYLOADS

CONSOLE-MODULE-THUMBWHEEL POSITION TO RECORDER FORM

CONSOLE NUMBER	MODULE NUMBER	RECORDER SELECT THUMBWHEEL POSITION	RECORDER NUMBER	RECORDER TYPE
251	25	01		17-PEN AER
		02		
		03		
		04		
		05		
		06		
		07		
		08		
		09		
		10		

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

CONSOLE-MODULE-THUMBWHEEL POSITION TO RECORDER FORM

CONSOLE NUMBER	MODULE NUMBER	RECORDER SELECT THUMBWHEEL POSITION	RECORDER NUMBER	RECORDER TYPE
254	25	01		10-PEN SCR
		02		
		03		
		04		
		05		
		06		
		07		
		08		
		09		
		10		

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CHG/PAYLOADS

CONSOLE-MODULE-THUMBWHEEL POSITION TO RECORDER FORM

CONSOLE NUMBER	MODULE NUMBER	RECORDER SELECT THUMBWHEEL POSITION	RECORDER NUMBER	RECORDER TYPE
255	25	01		17 PEN AER
		02		
		03		
		04		
		05		
		06		
		07		
		08		
		09		
		10		

6.2 RECORDER PEN FORMATS

This section defines the recorder pen formats to be used during operations.

ANALOG EVENT SYSTEM INPUT REQUIREMENTS DEFINITION

REFERENCE: JSC-100001/REV.AA/PAGE 3-31 (MCC Shuttle Development Plan)
JSC-11028/REV.3 CH.0 (SHUTTLE Data Processing Complex Software)

THE FOLLOWING TABLE LISTS THE AES FORMAT MSK CALLUP NUMBERS vs AES PEN GROUP NUMBERS.

AES FORMAT NUMBER (MSK CALLUP NUM)	AES PEN GROUP NUMBER	PEN GROUP DESCRIPTION
000	000	FORMAT DESELECT
001	001	8-PEN GROUP
002	002	8-PEN GROUP
003	003	8-PEN GROUP
004	004	8-PEN GROUP
005	005	8-PEN GROUP
006	006	8-PEN GROUP
007	007	8-PEN GROUP
008	008	8-PEN GROUP
009	009	8-PEN GROUP
010	010	8-PEN GROUP
011	011	8-PEN GROUP
012	012	8-PEN GROUP
013	013	8-PEN GROUP
014	014	15-PEN GROUP
015	015	15-PEN GROUP
016	016	15-PEN GROUP
017	017	15-PEN GROUP
018	018	15-PEN GROUP
019	019	15-PEN GROUP
020	020	15-PEN GROUP
021	021	15-PEN GROUP
022	022	15-PEN GROUP
023	023	15-PEN GROUP
024	024	15-PEN GROUP
025	025	15-PEN GROUP
026	026	15-PEN GROUP
027	027	15-PEN GROUP
028	028	15-PEN GROUP
029	029	15-PEN GROUP
030	030	15-PEN GROUP
031	031	15-PEN GROUP
032	032	15-PEN GROUP
033	033	15-PEN GROUP
034	034	15-PEN GROUP
035	035	15-PEN GROUP
036	036	15-PEN GROUP
037	037	15-PEN GROUP
038	038	15-PEN GROUP
039	039	15-PEN GROUP

AES FORMAT MSK CALLUP NUMBERS vs AES PEN GROUP NUMBERS (CONT'D)

AES FORMAT NUMBER (MSK CALLUP NUM)	AES PEN GROUP NUMBER	PEN GROUP DESCRIPTION
040	040	15-PEN GROUP
041	041	15-PEN GROUP
042	042	15-PEN GROUP
043	043	15-PEN GROUP
044	044	15-PEN GROUP
045	045	15-PEN GROUP
046	046	15-PEN GROUP
047	047	15-PEN GROUP
048	048	15-PEN GROUP
049	049	15-PEN GROUP
050	050	15-PEN GROUP
051	051	15-PEN GROUP
052	____ & ____	PEN GROUP "COUPLING"
053	____ & ____	PEN GROUP "COUPLING"
054	____ & ____	PEN GROUP "COUPLING"
055	____ & ____	PEN GROUP "COUPLING"
056	____ & ____	PEN GROUP "COUPLING"
057	____ & ____	PEN GROUP "COUPLING"
058	____ & ____	PEN GROUP "COUPLING"
059	____ & ____	PEN GROUP "COUPLING"
060	____ & ____	PEN GROUP "COUPLING"
061	____ & ____	PEN GROUP "COUPLING"
062	400 & 401 & 402 & 403	24-PEN GROUPS TO THE 100-PEN EVENT RECORDER
063	600 & 601 & 602 & 603 & 604 & 605	24-PEN GROUPS TO THE 150-PEN EVENT RECORDER
064	606 & 607 & 608 & 609 & 610 & 611	24-PEN GROUPS TO THE 150-PEN EVENT RECORDER

NOTE: THERE WILL BE A "SET" OF THESE AES PEN GROUPS FOR EACH DOWNLINK COMBINATION.

THE MAXIMUM ALLOWABLE RANGE FOR USE IN AES FORMAT (MSK CALLUP) SELECTION IS FROM 000 THRU 255 (DECIMAL). THE RANGE OF AES/MSK FORMAT NUMBERS FROM 001 THRU 068 HAVE BEEN RESERVED FOR OD LINK SELECT. ADDITIONALLY, AES/MSK FORMAT NUMBER 000 IS USED FOR AES FORMAT DESELECTION.

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

AES FORMAT FORM FOR 8-PEN ANALOG GROUP _____

AES FORMAT NUMBER 044 / DOWNLINK COMBINATION _____
(NSK CALLUP NUMBER)

PEN NUM	MEASUREMENT NUMBER	SPECIAL PROCESSING CODE	MEASUREMENT DESCRIPTION
T1			(TIME) MTU - 1 MET
01	P20T0090V		SCAN BASEPLATE TEMP
02	P20T0091V		MEA BASEPLATE TEMP
03	P20T0092V		MEA ELECT TEMP
04	P20C0096V		SCAN AC CURRENT
05	P20C0097V		TOTAL CURRENT
06			
07			
08			
T2			(TIME) MTU - 1 GMT

NOTE: ALL MEASUREMENTS FOR A GIVEN AES FORMAT MUST BE FROM THE SAME DATA SOURCE. (OI, GPC1, etc...)

** ALTHOUGH ' TIMES ' OTHER THAN 'SPACECRAFT TIMES' WILL BE AVAILABLE VIA THE TIME SELECT SWITCHES AT THE RECORDERS, ONLY THOSE TIMES THAT ARE IN THE "TELEMETRY" STREAM ARE TO BE ENTERED INTO AN AES PEN GROUP FORMAT.

THE FOLLOWING TIMES HAVE BEEN IDENTIFIED FOR REQUESTS VIA AES PEN GROUP FORMATS:

- o ORBITER MTU-1 GMT
- o ORBITER MTU-2 GMT
- o ORBITER MTU-1 MET
- o ORBITER MTU-2 MET
- o ORBITER PRIME GPC-GMT
- o ORBITER PRIME GPC-MET
- o TPC INTERNAL TIMER
- o PAYLOAD TIME

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

AES FORMAT FORM FOR 8-PEN ANALOG GROUP _____

AES FORMAT NUMBER 045 / DOWNLINK COMBINATION _____
(MSK CALLUP NUMBER)

PEN NUM	MEASUREMENT NUMBER	SPECIAL PROCESSING CODE	MEASUREMENT DESCRIPTION
T1			(TIME) MTU -1 MET
01	P20U0195V		ESG DELAY
02	P20U0196V		ESG ANALOG
03	P20E0201V		FORWARD XMTR POWER
04	P20E0202V		REFLECTED XMTR POWER
05	P20H0239V		FILM REMAINING
06	P20T0227V		RADAR BASEPLATE TEMP
07	P20T0221V		FWD/REFL PWR MON TEMP
08	P20E0200V		INTEG ECHO AMP
T2			(TIME) MTU -1 GMT

NOTE: ALL MEASUREMENTS FOR A GIVEN AES FORMAT MUST BE FROM THE SAME DATA SOURCE. (OI, GPC1, etc...)

** ALTHOUGH ' TIMES ' OTHER THAN 'SPACECRAFT TIMES' WILL BE AVAILABLE VIA THE TIME SELECT SWITCHES AT THE RECORDERS, ONLY THOSE TIMES THAT ARE IN THE "TELEMETRY" STREAM ARE TO BE ENTERED INTO AN AES PEN GROUP FORMAT.

THE FOLLOWING TIMES HAVE BEEN IDENTIFIED FOR REQUESTS VIA AES PEN GROUP FORMATS:

- ORBITER MTU-1 GMT
- ORBITER MTU-2 GMT
- ORBITER MTU-1 MET
- ORBITER MTU-2 MET
- ORBITER PRIME GPC-GMT
- ORBITER PRIME GPC-MET
- TPC INTERNAL TIMER
- PAYLOAD TIME

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CHL/PAYLOADS

AES FORMAT FORM FOR 8-PEN ANALOG GROUP _____

AES FORMAT NUMBER 046 / DOWNLINK COMBINATION _____
(MSK CALLUP NUMBER)

PEN NUM	MEASUREMENT NUMBER	SPECIAL PROCESSING CODE	MEASUREMENT DESCRIPTION
T1			(TIME) MTU-1 MET
01	P20U0195V		ESG DELAY
02	P20U0196V		ESG ANALOG
03	P20T0228V		OPTICAL RCDR TEMP
04	P20T0225V		PWR AMP C TEMP
05	P20V0217V		INPUT BUS VOLT
06	P20C0209V		STBY INPUT CUR 1
07	P20C0210V		OPER INPUT CURRENT
08	P20T0222V		RECEIVER TEMP
T2			(TIME) MTU-1 GMT

NOTE: ALL MEASUREMENTS FOR A GIVEN AES FORMAT MUST BE FROM THE SAME DATA SOURCE. (OI, GPC1, etc...)

** ALTHOUGH ' TIMES ' OTHER THAN 'SPACECRAFT TIMES' WILL BE AVAILABLE VIA THE TIME SELECT SWITCHES AT THE RECORDERS, ONLY THOSE TIMES THAT ARE IN THE "TELEMETRY" STREAM ARE TO BE ENTERED INTO AN AES PEN GROUP FORMAT.

THE FOLLOWING TIMES HAVE BEEN IDENTIFIED FOR REQUESTS VIA AES PEN GROUP FORMATS:

- ORBITER MTU-1 GMT
- ORBITER MTU-2 GMT
- ORBITER MTU-1 MET
- ORBITER MTU-2 MET
- ORBITER PRIME GPC-GMT
- ORBITER PRIME GPC-MET
- TPC INTERNAL TIMER
- PAYLOAD TIME

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM - CH6/PAYLOADS

AES FORMAT FORM FOR 8-PEN ANALOG GROUP _____

AES FORMAT NUMBER 047 / DOWNLINK COMBINATION _____
(MSK CALLUP NUMBER)

PEN NUM	MEASUREMENT NUMBER	SPECIAL PROCESSING CODE	MEASUREMENT DESCRIPTION
T1			(TIME) MTU-1 MET
01	P20U0195V		ESG DELAY
02	P20U0196V		ESG ANALOG
03	P20V0216V		CAL REF VOLTS
04	P20C0208V		TXOP 14 CURRENT
05	P20C0205V		TXOP 9 CURRENT
06	P20T0224V		PWR AMP B TEMP
07	P20T0223V		PWR AMP A TEMP
08	P20C0207V		TXOP 13 CURRENT
T2			(TIME) MTU-1 GMT

NOTE: ALL MEASUREMENTS FOR A GIVEN AES FORMAT MUST BE FROM THE SAME DATA SOURCE. (OI, GPC1, etc...)

** ALTHOUGH ' TIMES ' OTHER THAN 'SPACECRAFT TIMES' WILL BE AVAILABLE VIA THE TIME SELECT SWITCHES AT THE RECORDERS, ONLY THOSE TIMES THAT ARE IN THE "TELEMETRY" STREAM ARE TO BE ENTERED INTO AN AES PEN GROUP FORMAT.

THE FOLLOWING TIMES HAVE BEEN IDENTIFIED FOR REQUESTS VIA AES PEN GROUP FORMATS:

- o ORBITER MTU-1 GMT
- o ORBITER MTU-2 GMT
- o ORBITER MTU-1 MET
- o ORBITER MTU-2 MET
- o ORBITER PRIME GPC-GMT
- o ORBITER PRIME GPC-MET
- o TPC INTERNAL TIMER
- o PAYLOAD TIME

03-25-77
MCC CONFIGURATION CONTROL

OFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOADS

AES FORMAT FORM FOR 8-PEN ANALOG GROUP _____

AES FORMAT NUMBER 048 / DOWNLINK COMBINATION _____
(MSK CALLUP NUMBER)

PEN NUM	MEASUREMENT NUMBER	SPECIAL PROCESSING CODE	MEASUREMENT DESCRIPTION
T1			(TIME) MTU-1 MET
01	P20U0195V		ESG DELAY
02	P20U0196V		ESG ANALOG
03	P20E0206V		VIDEO STATUS
04	P20T0226V		CASSETTE TEMP
05			
06			
07			
08			
T2			(TIME) MTU-1 GMT

NOTE: ALL MEASUREMENTS FOR A GIVEN AES FORMAT MUST BE FROM THE SAME DATA SOURCE. (OI, GPC1, etc...)

** ALTHOUGH ' TIMES ' OTHER THAN 'SPACECRAFT TIMES' WILL BE AVAILABLE VIA THE TIME SELECT SWITCHES AT THE RECORDERS, ONLY THOSE TIMES THAT ARE IN THE "TELEMETRY" STREAM ARE TO BE ENTERED INTO AN AES PEN GROUP FORMAT.

THE FOLLOWING TIMES HAVE BEEN IDENTIFIED FOR REQUESTS VIA AES PEN GROUP FORMATS:

- o ORBITER MTU-1 GMT
- o ORBITER MTU-2 GMT
- o ORBITER MTU-1 MET
- o ORBITER MTU-2 MET
- o ORBITER PRIME GPC-GMT
- o ORBITER PRIME GPC-MET
- o TPC INTERNAL TIMER
- o PAYLOAD TIME

SECTION 7
SUMMARY MESSAGE ENABLE KEYBOARD

The Summary Message Enable Keyboard (SMEK) is a multifunction module which permits the console operator to initiate real-time inputs to enable/disable the boundaries of limit-sensed parameters and to generate tabulated data in predefined formats. This section defines the configuration of the SMEK module.

SUMMAY MESSAGE ENABLE KEYBOARD INPUT FORM EXPLANATION:

DATA PACK ACRONYM - Eg...GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...

ROOM NO - Enter the room number that the console is located in.

CONSOLE NO - Enter the Console number.

CONSOLE TITLE - Enter the Console Title Eg...COMPUTER SUP

MODULE LOCATION - Enter the Module location designation number. This number will always be greater than 19 for this type of module.

MODULE NAME - Enter 'SMEK'

MODULE TYPE - Enter 'A19/A'

PBI LOC - This number relates to the physical location (and software identifier) of each PBI on this module.

01	06	11	16	21	26	31	36
02	07	12	17	22	27	32	37
03	08	13	18	23	28	33	38
04	09	14	19	24	29	34	39
05	10	15	20	25	30	35	40

CLR - Colors available are:

RED, GREEN, AMBER, BLUE & WHITE (R,G,A,B & W)

LABEL - Enter the label required . Labels are limited to 5 Lines/6 Characters each (Space=Character).

MEASUREMENT - Enter the DPB assigned SMEK measurement number.

PAYLOAD 8 (EXPERIMENTS) CSL 257

SMEK

SIR-A HIST 3324				SIR-A LIMITS SET 1			SIM
				SIR-A LIMITS SET 2			PB 1
PALLET HIST.				OCE LIMITS			PB 2
EXP HIST 3321							EXECUT
				ENABLE LIMITS	DISABLE LIMITS		CLEAR

03-25-77
MCC CONFIGURATION CONTROL

SUMMARY MESSAGE ENABLE KEYBOARD
CFT REQUIREMENTS INPUT FORM
DATA PACK ACRONYM CH6/PAYLOAD

ROOM NO: 213
CONSOLE NO: 257
CONSOLE TITLE: PAYLOAD 8

MODULE LOCATION:
MODULE NAME: SMEK
MODULE TYPE:

PBI LOC	CLR	LABEL	MEASUREMENT
01	W	SIR-A · HIST · 3324	
02			
03	W	PALLET · HIST	
04	–	EXP · HIST · 3321	
05	–		
06	–		
07	–		
08	–		
09	–		
10	–		
11	–		
12	–		
13	–		
14	–		
15	–		
16	–		
17	–		
18	–		
19	–		
20	–		
21	W	SIR-A · LIMITS · SET 1	
22	W	SIR A · LIMITS · SET 2	
23	W	OCE · LIMITS	
24	–		
25	–	ENABLE · LIMITS	
26	–		
27	–		
28	–		
29	–		
30	–	DISABLE · LIMITS	
31	–		
32	–		
33	–		
34	–		
35	–		
36	–	SIM	
37	–	PB 1	
38	–	PB 2	
39	–	EXECUT	
40	–	CLEAR	

SECTION 8
MULTIPLE COMMAND MODULE

The Multiple Command Module (MCM) is a special-purpose module which provides the console operator with the capability of initiating uplink of prestored data. This section defines the configuration of the MCM module.

OFT REQUIREMENTS INPUT FORM

MULTIPLE COMMAND MODULE (MCM) REQUIREMENTS INPUT FORM EXPLANATION:

DATA PACK ACRONYM -	Eg...GUIDANCE, BOOSTER, FLIGHT CONTROL, EMES,...
ROOM NO -	Enter the room number that the console is located in.
CONSOLE NO -	Enter the Console Number.
CONSOLE TITLE -	Enter the Console Title Eg...COMPUTER SUP
MODULE LOCATION -	Enter the Module Location designation number. This number will always be greater than 19 for this type of module.
MODULE NAME -	MULTIPLE COMMAND MODULE (MCM)
MODULE TYPE -	DRK4
FIELD SELECT PBI -	PBI'S 01 THRU 12. Depression of one of these PBIs selects a field of 32 possible 'commands'. Eg.... PBI-01 depressed will cause lamp-01 of each of the 32 Rear Projection Readouts to illuminate, thereby indicating, for this field select PBI depression, the 'command' which will result from depression of each of the 32 Rear Projection Readouts.
R/O NUM -	THE Rear Projection Readout/Switch number is shown under this header.
LAMP NUM -	The Lamp Number (01 thru 12) of the readout is shown under this header.
LABEL -	For 'Field Select PBI' entries, enter the Command Field Title. Note: Field Titles are limited to 3 Lines/8 Characters each.(BLANK=CHARACTER) For 'R/O NUM' entries, enter the Command Label required. Note: Command Select Labels are limited to 4 Lines/8 Characters each. (BLANK=CHARACTER)
MEASUREMENT -	Enter the Command Parameter Measurement Number as assigned by SLAPS/GDSD.

	1ECM OEX 1	2	3	4	5	6
CLEAR	7	8	9	10	11	12

2011 1ECM LAUNCH MODE	2012 1ECM ORBIT MODE	2013 1ECM DEORBIT MODE	2010 1ECM MDM RESET				
2001 ACIP ON	2002 ACIP TEST	2000 ACIP OFF					

	1	OFT PALLET SYSTEMS 2	3	4	5	6
CLEAR	7	8	9	10	11	12

2118 PUMPS 1 ON/ 2 OFF 1	2120 PUMPS 2 ON/ 1 OFF 2	2122 PUMPS OFF 3	2100 K2 MAPS ON	2102 K3 OCE ON	2104 K4 SMIRR ON	2106 K5 FILE ON	2112 K8 SIR-A ON
2119 PUMP 1 OFF 9	2121 PUMP 2 OFF 10	2123 K2-9 DC OFF 11	2101 K2 MAPS OFF 12	2103 K3 OCE OFF 13	2105 K4 SMIRR OFF 14	2107 K5 FILE OFF 15	2113 K8 SIR-A OFF 16
2116 K12-AC ON 17	2117 K12-AC OFF	2110 K7 ON	2111 K7 OFF	2114 K9 ON	2115 K9 OFF	2108 K6 FILE HTR ON	2109 K6 FILE HTR OFF

	1	2	MAPS OCE SMIRR 3	4	5	6
CLEAR	7	8	9	10	11	12

2351 MAPS POWER ON	2350 MAPS POWER RESET	2352 MAPS POWER OFF	2353 MAPS REBAL	2354 MAPS REBAL RESET	2360 OCE POWER ON	2361 OCE POWER OFF	4562 P/L REC RCDB/S2 OCE
		2104 K4 SMIRR ON	2376 SMIRR AUTO ON	2374 SMIRR CAL ON	2372 SMIRR COVER OPEN	2370 SMIRR MODE OPERATE	4550 P/L REC RCDA/S1 SMIRR
		2105 K4 SMIRR OFF	2377 SMIRR AUTO OFF	2375 SMIRR CAL OFF	2373 SMIRR COVER CLOSE	2371 SMIRR MODE STBY	4551 P/L REC STOP

	1	2	3	SIR-A 4	5	6	
CLEAR	7	8	9	10	11	12	

2242 SEQR OFF	2225 RADAR O/R ON	2223 RADAR O/R OFF	2221 RADAR XMIT/ RECORD	2214 RADAR XMIT OFF	2216 LEADER ON	2238 LC MUX 0	2239 LC MUX 1
2146 GAIN AGC			2211 STC ON	2212 STC OFF	2213 CHL OFF	2240 LC MUX 2	2241 LC MUX 3
2138 GAIN 77dB	2139 GAIN 80dB	2140 GAIN 83dB	2141 GAIN 86dB	2142 GAIN 89dB	2143 GAIN 92dB	2144 GAIN 95dB	2145 GAIN 98dB
2137 PRF 1464 PPS	2131 PRF 1540 PPS	2132 PRF 1581 PPS	2130 PRF 1624 PPS	2133 PRF 1670 PPS	2134 PRF 1718 PPS	2135 PRF 1770 PPS	2136 PRF 1824 PPS

	1	2	3	4	SIR-A STC 5	6
CLEAR	7	8	9	10	11	12

2211 STC ON	2212 STC OFF	2147 STC 0	2150 STC 3	2153 STC 6	2156 STC 9	2159 STC 12	2162 STC 15
2165 STC 18	2168 STC 21	2171 STC 24	2174 STC 27	2177 STC 30	2180 STC 33	2183 STC 36	2186 STC 39
2189 STC 42	2192 STC 45	2195 STC 48	2198 STC 51	2201 STC 54	2204 STC 57	2207 STC 60	2210 STC 63

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MCC CONFIGURATION CONTROL DATA PACK ACRONYM CH6/PAYLOADS

ROOM NO: 213
CONSOLE NO: 252
CONSOLE TITLE: PAYLOAD 3

MODULE LOCATION: 30
MODULE NAME: MULTIPLE COMMAND MODULE (MCM)
MODULE TYPE: DRK4

FIELD SELECT FBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
01			IECM • OEX		CMD FIELD SELECT
	01	01	2011 • IECM • LAUNCH • MODE	P30K00011U	COMMAND CIM
	02	01	2012 • IECM • ORBIT • MODE	P30K00021U	COMMAND CIM
	03	01	2013 • IECM • DEORBIT • MODE	P30K00031U	COMMAND CIM
	04	01	2010 • IECM • MDM • RESET	P30K00181U	COMMAND CIM
	05	01			COMMAND CIM
	06	01			COMMAND CIM
	07	01			COMMAND CIM
	08	01			COMMAND CIM
	09	01	2001 • ACIP • ON	V07K90311U	COMMAND CIM
	10	01	2002 • ACIP • TEST	V07K90331U	COMMAND CIM
	11	01	2002 • ACIP • OFF	V07K90301U	COMMAND CIM
	12	01			COMMAND CIM
	13	01			COMMAND CIM
	14	01			COMMAND CIM
	15	01			COMMAND CIM
	16	01			COMMAND CIM
	17	01			COMMAND CIM
	18	01			COMMAND CIM
	19	01			COMMAND CIM
	20	01			COMMAND CIM
	21	01			COMMAND CIM
	22	01			COMMAND CIM
	23	01			COMMAND CIM
	24	01			COMMAND CIM
	25	01			COMMAND CIM
	26	01			COMMAND CIM
	27	01			COMMAND CIM
	28	01			COMMAND CIM
	29	01			COMMAND CIM
	30	01			COMMAND CIM
	31	01			COMMAND CIM
	32	01			COMMAND CIM
02			OFT • PALLET • SYSTEMS		CMD FIELD SELECT
	01	02	2118 • PUMPS • 1 ON / • 2 OFF	P03K10744U	COMMAND CIM
	02	02	2120 • PUMPS • 2 ON / • 1 OFF	P03K10766U	COMMAND CIM
	03	02	2122 • PUMPS • OFF	P03K10777U	COMMAND CIM
	04	02	2100 • K2 • MAPS • ON	P03K10444U	COMMAND CIM
	05	02	2102 • K3 • OCE • ON	P03K10474U	COMMAND CIM
	06	02	2104 • K4 • SMIRR • ON	P03K10504U	COMMAND CIM
	07	02	2106 • K5 • FILE • ON	P03K10414U	COMMAND CIM
	08	02	2112 • K8 • SIR-A • ON	P03K10534U	COMMAND CIM
	09	02	2119 • PUMP • 1 • OFF	P03K10694U	COMMAND CIM
	10	02	2121 • PUMP • 2 • OFF	P03K10722U	COMMAND CIM
	11	02	2123 • K2-9 DC • OFF	P03K10784U	COMMAND CIM
	12	02	2101 • K2 • MAPS • OFF	P03K10454U	COMMAND CIM

ROOM NO: 213
CONSOLE NO: 252
CONSOLE TITLE: PAYLOAD 3

MODULE LOCATION: 30
MODULE NAME: MULTIPLE COMMAND MODULE (MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	13	02	2103·K3·OCE·OFF	P03K1048U	COMMAND CIM
	14	02	2105·K4·SMIRR·OFF	P03K1051U	COMMAND CIM
	15	02	2107·K5·FILE·OFF	P03K1042U	COMMAND CIM
	16	02	2113·K8·SIR-A·OFF	P03K1054U	COMMAND CIM
	17	02	2116·K12-AC·ON	P03K1065U	COMMAND CIM
	18	02	2117·K12-AC·OFF	P03K1066U	COMMAND CIM
	19	02	2110·K7·ON	P03K1059U	COMMAND CIM
	20	02	2111·K7·OFF	P03K1060U	COMMAND CIM
	21	02	2114·K9·ON	P03K1062U	COMMAND CIM
	22	02	2115·K9·OFF	P03K1063U	COMMAND CIM
	23	02	2108·K6·FILE HTR·ON	P03K1056U	COMMAND CIM
	24	02	2109·K6·FILE HTR·OFF	P03K1057U	COMMAND CIM
	25	02			COMMAND CIM
	26	02			COMMAND CIM
	27	02			COMMAND CIM
	28	02			COMMAND CIM
	29	02			COMMAND CIM
	30	02			COMMAND CIM
	31	02			COMMAND CIM
	32	02			COMMAND CIM
03			MAPS·OCE·SMIRR		CMD FIELD SELECT
	01	03	2351·MAPS·POWER·ON	P20K00564U	COMMAND CIM
	02	03	2350·MAPS·POWER·RESET	P20K00534U	COMMAND CIM
	03	03	2352·MAPS·POWER·OFF	P20K00574U	COMMAND CIM
	04	03	2353·MAPS·REBAL	P20K00584U	COMMAND CIM
	05	03	2354·MAPS·REBAL·RESET	P20K00544U	COMMAND CIM
	06	03	2360·OCE·POWER·ON	P20K00714U	COMMAND CIM
	07	03	2361·OCE·POWER·OFF	P20K00724U	COMMAND CIM
	08	03	4562·P/L REC·RCDB/S2·OCE	V75K63564U	COMMAND CIM
	09	03			COMMAND CIM
	10	03			COMMAND CIM
	11	03	2104·K4·SMIRR·ON	P03K1050U	COMMAND CIM
	12	03	2376·SMIRR·AUTO·ON	P20K01074U	COMMAND CIM
	13	03	2374·SMIRR·CAL·ON	P20K01054U	COMMAND CIM
	14	03	2372·SMIRR·COVER·OPEN	P20K01034U	COMMAND CIM
	15	03	2370·SMIRR·MODE·OPERATE	P20K01014U	COMMAND CIM
	16	03	4550·P/L REC·RCDA/S1·SMIRR	V75K63450U	COMMAND CIM
	17	03			COMMAND CIM
	18	03			COMMAND CIM
	19	03	2105·K4·SMIRR·OFF	P03K1051U	COMMAND CIM
	20	03	2377·SMIRR·AUTO·OFF	P20K01084U	COMMAND CIM
	21	03	2375·SMIRR·CAL·OFF	P20K01064U	COMMAND CIM
	22	03	2373·SMIRR·COVER·CLOSE	P20K01044U	COMMAND CIM
	23	03	2371·SMIRR·MODE·STBY	P20K01024U	COMMAND CIM
	24	03	4551·P/L REC·STOP	V75K63534U	COMMAND CIM
	25	03			COMMAND CIM

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MCC CONFIGURATION CONTROL

MULTIPLE COMMAND MODULE INPUT FORM
DATA PACK ACRONYM CHG/PAYLOADS

ROOM NO: 213
CONSOLE NO: 252
CONSOLE TITLE: PAYLOAD 3

MODULE LOCATION: 30
MODULE NAME: MULTIPLE COMMAND MODULE (MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	26	03			
	27	03			COMMAND CIM
	28	03			COMMAND CIM
	29	03			COMMAND CIM
	30	03			COMMAND CIM
	31	03			COMMAND CIM
	32	03			COMMAND CIM
04					COMMAND CIM
			SIR-A		CMD FIELD SELECT
	01	04	2242 · SEQR · OFF	P20K03774	COMMAND CIM
	02	04	2225 · RADAR · O/R · ON	P20K03604	COMMAND CIM
	03	04	2223 · RADAR · O/R · OFF	P20K03574	COMMAND CIM
	04	04	2221 · RADAR · XMIT/RECORD	P20K03544	COMMAND CIM
	05	04	2214 · RADAR · XMIT · OFF	P20K03494	COMMAND CIM
	06	04	2216 · LEADER · ON	P20K03514	COMMAND CIM
	07	04	2238 · LC MUX · Ø	P20K03734	COMMAND CIM
	08	04	2239 · LC MUX · 1	P20K03744	COMMAND CIM
	09	04	2146 · GAIN · AGC ·	P20K02814	COMMAND CIM
	10	04			COMMAND CIM
	11	04			COMMAND CIM
	12	04	2211 · STC · ON	P20K03464	COMMAND CIM
	13	04	2212 · STC · OFF	P20K03474	COMMAND CIM
	14	04	2213 · CAL · OFF	P20K03484	COMMAND CIM
	15	04	2240 · LC MUX · 2	P20K03754	COMMAND CIM
	16	04	2241 · LC MUX · 3	P20K03764	COMMAND CIM
	17	04	2138 · GAIN · 77 dB	P20K02734	COMMAND CIM
	18	04	2139 · GAIN · 80 dB	P20K02744	COMMAND CIM
	19	04	2140 · GAIN · 83 dB	P20K02754	COMMAND CIM
	20	04	2141 · GAIN · 86 dB	P20K02764	COMMAND CIM
	21	04	2142 · GAIN · 89 dB	P20K02774	COMMAND CIM
	22	04	2143 · GAIN · 92 dB	P20K02784	COMMAND CIM
	23	04	2144 · GAIN · 95 dB	P20K02794	COMMAND CIM
	24	04	2145 · GAIN · 98 dB	P20K02804	COMMAND CIM
	25	04	2137 · PRF · 1464 · pps	P20K02654	COMMAND CIM
	26	04	2131 · PRF · 1540 · pps	P20K02664	COMMAND CIM
	27	04	2132 · PRF · 1581 · pps	P20K02674	COMMAND CIM
	28	04	2130 · PRF · 1624 · pps	P20K02684	COMMAND CIM
	29	04	2133 · PRF · 1670 · pps	P20K02694	COMMAND CIM
	30	04	2134 · PRF · 1718 · pps	P20K02704	COMMAND CIM
	31	04	2135 · PRF · 1770 · pps	P20K02714	COMMAND CIM
	32	04	2136 · PRF · 1824 · pps	P20K02724	COMMAND CIM
05			SIR-A · STC		CMD FIELD SELECT
	01	05	2211 · STC · ON	P20K03464	COMMAND CIM
	02	05	2212 · STC · OFF	P20K03474	COMMAND CIM
	03	05	2147 · STC · Ø	P20K02824	COMMAND CIM
	04	05	2150 · STC · 3	P20K02854	COMMAND CIM
	05	05	2153 · STC · 6	P20K02884	COMMAND CIM

MCC CONFIGURATION CONTROL DATA PACK ACRONYM CH6/PAYLOADS

ROOM NO: 213
CONSOLE NO: 252
CONSOLE TITLE: PAYLOAD 3

MODULE LOCATION: 30
MODULE NAME: MULTIPLE COMMAND MODULE (MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	06	05	2156. STC. 9	P20K02914	COMMAND CIM
	07	05	2159. STC. 12	P20K02944	COMMAND CIM
	08	05	2162. STC. 15	P20K02974	COMMAND CIM
	09	05	2165. STC. 18	P20K03004	COMMAND CIM
	10	05	2168. STC. 21	P20K03034	COMMAND CIM
	11	05	2171. STC. 24	P20K03064	COMMAND CIM
	12	05	2174. STC. 27	P20K03094	COMMAND CIM
	13	05	2177. STC. 30	P20K03124	COMMAND CIM
	14	05	2180. STC. 33	P20K03154	COMMAND CIM
	15	05	2183. STC. 36	P20K03184	COMMAND CIM
	16	05	2186. STC. 39	P20K03214	COMMAND CIM
	17	05	2189. STC. 42	P20K03244	COMMAND CIM
	18	05	2192. STC. 45	P20K03274	COMMAND CIM
	19	05	2195. STC. 48	P20K03304	COMMAND CIM
	20	05	2198. STC. 51	P20K03334	COMMAND CIM
	21	05	2201. STC. 54	P20K03364	COMMAND CIM
	22	05	2204. STC. 57	P20K03394	COMMAND CIM
	23	05	2207. STC. 60	P20K03424	COMMAND CIM
	24	05	2210. STC. 63	P20K03454	COMMAND CIM
	25	05			COMMAND CIM
	26	05			COMMAND CIM
	27	05			COMMAND CIM
	28	05			COMMAND CIM
	29	05			COMMAND CIM
	30	05			COMMAND CIM
	31	05			COMMAND CIM
	32	05			COMMAND CIM
06					CMD FIELD SELECT
	01	06			COMMAND CIM
	02	06			COMMAND CIM
	03	06			COMMAND CIM
	04	06			COMMAND CIM
	05	06			COMMAND CIM
	06	06			COMMAND CIM
	07	06			COMMAND CIM
	08	06			COMMAND CIM
	09	06			COMMAND CIM
	10	06			COMMAND CIM
	11	06			COMMAND CIM
	12	06			COMMAND CIM
	13	06			COMMAND CIM
	14	06			COMMAND CIM
	15	06			COMMAND CIM
	16	06			COMMAND CIM
	17	06			COMMAND CIM
	18	06			COMMAND CIM

ROOM NO:
CONSOLE NO:
CONSOLE TITLE:

MODULE LOCATION:
MODULE NAME: MULTIPLE COMMAND MODULE (MCM) CONT'D-
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	19	06			COMMAND CIM
	20	06			COMMAND CIM
	21	06			COMMAND CIM
	22	06			COMMAND CIM
	23	06			COMMAND CIM
	24	06			COMMAND CIM
	25	06			COMMAND CIM
	26	06			COMMAND CIM
	27	06			COMMAND CIM
	28	06			COMMAND CIM
	29	06			COMMAND CIM
	30	06			COMMAND CIM
	31	06			COMMAND CIM
	32	06			COMMAND CIM
07					CMD FIELD SELECT
	01	07			COMMAND CIM
	02	07			COMMAND CIM
	03	07			COMMAND CIM
	04	07			COMMAND CIM
	05	07			COMMAND CIM
	06	07			COMMAND CIM
	07	07			COMMAND CIM
	08	07			COMMAND CIM
	09	07			COMMAND CIM
	10	07			COMMAND CIM
	11	07			COMMAND CIM
	12	07			COMMAND CIM
	13	07			COMMAND CIM
	14	07			COMMAND CIM
	15	07			COMMAND CIM
	16	07			COMMAND CIM
	17	07			COMMAND CIM
	18	07			COMMAND CIM
	19	07			COMMAND CIM
	20	07			COMMAND CIM
	21	07			COMMAND CIM
	22	07			COMMAND CIM
	23	07			COMMAND CIM
	24	07			COMMAND CIM
	25	07			COMMAND CIM
	26	07			COMMAND CIM
	27	07			COMMAND CIM
	28	07			COMMAND CIM
	29	07			COMMAND CIM
	30	07			COMMAND CIM
	31	07			COMMAND CIM
	32	07			COMMAND CIM

ROOM NO:
CONSOLE NO:
CONSOLE TITLE:

MODULE LOCATION:
MODULE NAME: MULTIPLE COMMAND MODULE(MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
08					CMD FIELD SELECT
	01	08			COMMAND CIM
	02	08			COMMAND CIM
	03	08			COMMAND CIM
	04	08			COMMAND CIM
	05	08			COMMAND CIM
	06	08			COMMAND CIM
	07	08			COMMAND CIM
	08	08			COMMAND CIM
	09	08			COMMAND CIM
	10	08			COMMAND CIM
	11	08			COMMAND CIM
	12	08			COMMAND CIM
	13	08			COMMAND CIM
	14	08			COMMAND CIM
	15	08			COMMAND CIM
	16	08			COMMAND CIM
	17	08			COMMAND CIM
	18	08			COMMAND CIM
	19	08			COMMAND CIM
	20	08			COMMAND CIM
	21	08			COMMAND CIM
	22	08			COMMAND CIM
	23	08			COMMAND CIM
	24	08			COMMAND CIM
	25	08			COMMAND CIM
	26	08			COMMAND CIM
	27	08			COMMAND CIM
	28	08			COMMAND CIM
	29	08			COMMAND CIM
	30	08			COMMAND CIM
	31	08			COMMAND CIM
	32	08			COMMAND CIM
09					CMD FIELD SELECT
	01	09			COMMAND CIM
	02	09			COMMAND CIM
	03	09			COMMAND CIM
	04	09			COMMAND CIM
	05	09			COMMAND CIM
	06	09			COMMAND CIM
	07	09			COMMAND CIM
	08	09			COMMAND CIM
	09	09			COMMAND CIM
	10	09			COMMAND CIM
	11	09			COMMAND CIM
	12	09			COMMAND CIM

MULTIPLE COMMAND MODULE INPUT FORM
DATA PACK ACRONYM CHL/PAYLOADS

ROOM NO:
CONSOLE NO:
CONSOLE TITLE:

MODULE LOCATION:
MODULE NAME: MULTIPLE COMMAND MODULE(MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	13	09			COMMAND CIM
	14	09			COMMAND CIM
	15	09			COMMAND CIM
	16	09			COMMAND CIM
	17	09			COMMAND CIM
	18	09			COMMAND CIM
	19	09			COMMAND CIM
	20	09			COMMAND CIM
	21	09			COMMAND CIM
	22	09			COMMAND CIM
	23	09			COMMAND CIM
	24	09			COMMAND CIM
	25	09			COMMAND CIM
	26	09			COMMAND CIM
	27	09			COMMAND CIM
	28	09			COMMAND CIM
	29	09			COMMAND CIM
	30	09			COMMAND CIM
	31	09			COMMAND CIM
	32	09			COMMAND CIM
10					CMD FIELD SELECT
	01	10			COMMAND CIM
	02	10			COMMAND CIM
	03	10			COMMAND CIM
	04	10			COMMAND CIM
	05	10			COMMAND CIM
	06	10			COMMAND CIM
	07	10			COMMAND CIM
	08	10			COMMAND CIM
	09	10			COMMAND CIM
	10	10			COMMAND CIM
	11	10			COMMAND CIM
	12	10			COMMAND CIM
	13	10			COMMAND CIM
	14	10			COMMAND CIM
	15	10			COMMAND CIM
	16	10			COMMAND CIM
	17	10			COMMAND CIM
	18	10			COMMAND CIM
	19	10			COMMAND CIM
	20	10			COMMAND CIM
	21	10			COMMAND CIM
	22	10			COMMAND CIM
	23	10			COMMAND CIM
	24	10			COMMAND CIM
	25	10			COMMAND CIM

ROOM NO:
CONSOLE NO:
CONSOLE TITLE:

MODULE LOCATION:
MODULE NAME: MULTIPLE COMMAND MODULE (MCM) CONT'D--
MODULE TYPE: DRK4

FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	26	10			COMMAND CIM
	27	10			COMMAND CIM
	28	10			COMMAND CIM
	29	10			COMMAND CIM
	30	10			COMMAND CIM
	31	10			COMMAND CIM
	32	10			COMMAND CIM
11					CMD FIELD SELECT
	01	11			COMMAND CIM
	02	11			COMMAND CIM
	03	11			COMMAND CIM
	04	11			COMMAND CIM
	05	11			COMMAND CIM
	06	11			COMMAND CIM
	07	11			COMMAND CIM
	08	11			COMMAND CIM
	09	11			COMMAND CIM
	10	11			COMMAND CIM
	11	11			COMMAND CIM
	12	11			COMMAND CIM
	13	11			COMMAND CIM
	14	11			COMMAND CIM
	15	11			COMMAND CIM
	16	11			COMMAND CIM
	17	11			COMMAND CIM
	18	11			COMMAND CIM
	19	11			COMMAND CIM
	20	11			COMMAND CIM
	21	11			COMMAND CIM
	22	11			COMMAND CIM
	23	11			COMMAND CIM
	24	11			COMMAND CIM
	25	11			COMMAND CIM
	26	11			COMMAND CIM
	27	11			COMMAND CIM
	28	11			COMMAND CIM
	29	11			COMMAND CIM
	30	11			COMMAND CIM
	31	11			COMMAND CIM
	32	11			COMMAND CIM
12					CMD FIELD SELECT
	01	12			COMMAND CIM
	02	12			COMMAND CIM
	03	12			COMMAND CIM
	04	12			COMMAND CIM
	05	12			COMMAND CIM

MULTIPLE COMMAND MODULE INPUT FORM
DATA PACK ACRONYM CHG/PAYLOADS

ROOM NO:
CONSOLE NO:
CONSOLE TITLE:

MODULE LOCATION:
MODULE NAME: MULTIPLE COMMAND MODULE(MCM) CONT'D--
MODULE TYPE: DRK4

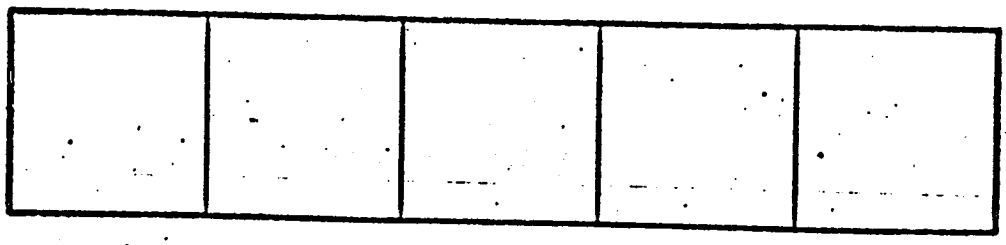
FIELD SELECT PBI	R/O NUM	LAMP NUM	LABEL	MEASUREMENT	
	06	12			COMMAND CIM
	07	12			COMMAND CIM
	08	12			COMMAND CIM
	09	12			COMMAND CIM
	10	12			COMMAND CIM
	11	12			COMMAND CIM
	12	12			COMMAND CIM
	13	12			COMMAND CIM
	14	12			COMMAND CIM
	15	12			COMMAND CIM
	16	12			COMMAND CIM
	17	12			COMMAND CIM
	18	12			COMMAND CIM
	19	12			COMMAND CIM
	20	12			COMMAND CIM
	21	12			COMMAND CIM
	22	12			COMMAND CIM
	23	12			COMMAND CIM
	24	12			COMMAND CIM
	25	12			COMMAND CIM
	26	12			COMMAND CIM
	27	12			COMMAND CIM
	28	12			COMMAND CIM
	29	12			COMMAND CIM
	30	12			COMMAND CIM
	31	12			COMMAND CIM
	32	12			COMMAND CIM

SECTION 9
VOICE COMMUNICATIONS

Voice communication is provided through numerous communication loops terminated on various keyset stations. These loops permit communications within the MCC, between the MCC and other facilities at JSC, and with other NASA and non-NASA remote facilities. This section defines the configuration of the voice communications keysets.

Listed below are those loops specifically defined by payload operations.

- EXP-1, EXP-2, TD-1, TD-2, TD-4 - Used prelaunch for coordination of payload installation, service operations, and integrated tests between JSC POCC and KSC facilities
- PAYLOAD CONFERENCE - Common loop for coordination within the JSC POCC and associated MPSR
- PAYLOAD DATA - Used to resolve data discrepancies and to establish data requirements
- PAYLOADS - Prime Mission Operations Control Room (MOCR) loop for the Payload Officer to interface with other MOCR operators and supportive personnel in POCC's and MPSR's
- POCC DIRECTOR - Prime loop for interfacing the POCC director by other POCC and flight control team personnel
- PAYLOAD MPSR/PAYLOAD TD - Used to interface with payload support systems personnel within the payload MPSR and used prelaunch, to interface with the KSC Payload Test Director
- USER SUPPPORT ROOM 1, 2, 3, and 4 - Coordination loop used by personnel concerned with the designated payload



USER SUPPORT ROOM

CR _____ DATE _____ RM _____ CSL _____ KEYSET _____ TYPE V. CIRCLE HOR. ONE

1 PABX	2 PABX	3 PD (m)	4 PD (T)	5 A/G 1 (m)	6 A/G 2 (M)
7 PAYLOADS (m)	8 PAYLOADS (T)	9 FD (m)	10 AFD CONF (m)	11 INCO (m)	12 A/G UHF (m)
13 P/L CONF (m)	14 P/L CONF (T)	15 MSN PLNG CONF (m)	16 CREW OPS (m)	17 COMM OIS 155 (m)	18 WX NET (m)
19 P/L DATA (m)	20 P/L DATA (T)	21 DFE (m)	22 DATA (m)	23. OPS PLNR (m)	24 OPS COORD (m)
25 P/L SYS (m)	26 P/L SYS (T)	27 P/L MPSR P/L TD OIS 133 (m)	28 P/L MPSR P/L TD (T)	29 SSR 1 CONF OIS 183 (m)	30 SSR 2 CONF OIS 161 (m)
31 EXP-1 OIS 164 (T)	32 EXP-2 OIS (T)	33 TD-1 OIS 131 (T)	34 TD-4 OIS 231 (T)	35 PLBK-1 STS TD OIS 131 (m)	36 PLBK-2 ET/SRB TD OIS 135 (m)
37 USR 1 (m)	38 USR 1 (T)	39 USR 2 (m)	40 USR 2 (T)	41 PLBK-3 OTD OIS 232 (m)	42. PLBK-4 ICOM A+B OIS 214,215 (m)
43 USR 3 (m)	44 USR 3 (T)	45 USR 4 (m)	46 USR 4 (T)	47 COMM CNTL (T)	48 DISPLAY (T)

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CCS POSN	CONS	MD	POI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2260	250	27						PAYLOAD 1 (LEFT)	213	C	V48MFD
			01	W	T	PABX	~~5621~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1206			C	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	1290			C	
			10	Y	M	4 • AFD CONF	1295			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	1033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L009			C	
			20	W	T	4 • PAYLOAD • DATA	L009			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	1015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L008			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L008			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1082			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1083			C	
			31	W	T	4 • EXP 1 • OIS 164	1004			C	
			32	W	T	4 • EXP 2 • OIS 174	1005			C	
			33	W	T	4 • TD 1 • OIS 131	1006			C	
			34	W	T	4 • TD 4 • OIS 231	1008			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLBK 2 • ET/SRD TD • OIS 135	1249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE ******	ROOM NUM	REV	KEYSET TYPE
2261	250	20									
			01	W	T	PABX		PAYLOAD 1 (RIGHT)	213	C	V48-FD
			02	W	T	PABX	~~5621~~ 5123			C	
			03	Y	M	4 • PD	5620			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	L092			C	
			06	Y	M	4 • A/G 2	A169			D	
			07	Y	M	4 • PAYLOADS	1206			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	L097			C	
			10	Y	M	4 • AFD CONF	1290			C	
			11	Y	M	4 • INCO	1295			C	
			12	Y	M	4 • A/G UHF	1022			C	
			13	Y	M	4 • PAYLOAD • CONF	1271			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L091			C	
			16	Y	M	4 • CREW OPS	L066			C	
			17	Y	M	4 • COMM • OIS 155	L074			C	
			18	Y	M	4 • WEATHER • NET	1033			C	
			19	Y	M	4 • PAYLOAD • DATA	L035			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L089			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	L106			C	
			23	Y	M	4 • OPS PLNR	1015			C	
			24	Y	M	4 • OPS COORD	L072			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L081			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	L088			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1050			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1082			C	
			31	W	T	4 • EXP 1 • OIS 164	1083			C	
			32	W	T	4 • EXP 2 • OIS 174	1004			C	
			33	W	T	4 • TD 1 • OIS 131	1085			C	
			34	W	T	4 • TD 4 • OIS 231	1086			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	1088			C	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	P048			D	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1249			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1056			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1057			C	
			42	Y	M	4 • PLBK 4 • ICOM A&D • 214 & 215	1250			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1251			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1058			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	1059			C	
			48	W	T	4 • DISPLAY	L032			C	
							L057			C	

CCS POSN	CONS	ND	PRI	CLR	T/H	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2282	251	27						PAYLOAD 2 (LEFT)	213	C	V40MFD
			01	W	T	PABX	~~5621~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	I286			C	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	I290			C	
			10	Y	M	4 • AFD CONF	I295			C	
			11	Y	M	4 • INCO	I022			C	
			12	Y	M	4 • A/G UHF	I271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	I033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L089			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	I015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L008			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	I050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	I050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	I082			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	I083			C	
			31	W	T	4 • EXP 1 • OIS 164	I084			C	
			32	W	T	4 • EXP 2 • OIS 174	I085			C	
			33	W	T	4 • TD 1 • OIS 131	I086			C	
			34	W	T	4 • TD 4 • OIS 231	I088			C	
			35	Y	M	4 • PLOK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLOK 2 • ET/SRB TD • OIS 135	I249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	I056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	I056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	I057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	I057			C	
			41	Y	M	4 • PLOK 3 • OTD • OIS 232	I250			C	
			42	Y	M	4 • PLOK 4 • ICOM ALB • 214 & 215	I251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	I058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	I058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	I059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	I059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	HD	PBI	CLR	T/M	••••••••••••••• LOOP LEGEND •••••••••••••••	LOOP DESIG	••••• POSITION TITLE ••••••	ROOM NUM	REV	KEYSET TYPE
2263	251	28									
			01	W	T	PABX		PAYLOAD 2 (RIGHT)	213	C	V48HFD
			02	W	T	PABX	~~5621~~ 5623			C	
			03	Y	M	4 • PD	5620			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	L092			C	
			06	Y	M	4 • A/G 2	A169			D	
			07	Y	M	4 • PAYLOADS	1288			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	L097			C	
			10	Y	M	4 • AFD CONF	1290			C	
			11	Y	M	4 • INCO	1295			C	
			12	Y	M	4 • A/G UHF	1022			C	
			13	Y	M	4 • PAYLOAD • CONF	1271			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L091			C	
			16	Y	M	4 • CREW OPS	L066			C	
			17	Y	M	4 • COMM • OIS 155	L074			C	
			18	Y	M	4 • WEATHER • NET	1033			C	
			19	Y	M	4 • PAYLOAD • DATA	L035			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L009			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	L106			C	
			23	Y	M	4 • OPS PLNR	1015			C	
			24	Y	M	4 • OPS COORD	L072			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L081			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	L088			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1050			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1082			C	
			31	W	T	4 • EXP 1 • OIS 164	1083			C	
			32	W	T	4 • EXP 2 • OIS 174	1084			C	
			33	W	T	4 • TD 1 • OIS 131	1085			C	
			34	W	T	4 • TD 4 • OIS 231	1086			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	1088			C	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	P048			D	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1249			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1056			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1057			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1250			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1251			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1058			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • CCHM • CONTROL	1059			C	
			48	W	T	4 • DISPLAY	L032			C	
							L057			C	

CCS POSN	CONS	MD	PDI	CLR	T/M	•••••••••••••••• LOOP LEGEND ••••••••••••••••	LOOP DESIG	••••• POSITION TITLE •••••	ROOM NUM	REV	KEYSET TYPE
2280	254	27						PAYLOAD 5 (LEFT)	213	C	V49-FD
			01	W	T	PABX	~~5621~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1206			C	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	1290			C	
			10	Y	M	4 • AFD CONF	1295			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	1033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L089			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	1015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1003			C	
			31	W	T	4 • EXP 1 • OIS 164	1004			C	
			32	W	T	4 • EXP 2 • OIS 174	1005			C	
			33	W	T	4 • TD 1 • OIS 131	1006			C	
			34	W	T	4 • TD 4 • OIS 231	1008			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2269	254	28						PAYLOAD 5 (RIGHT)	213	C	V40HFD
			01	W	T	PABX	~~5621~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1286			C	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	1290			C	
			10	Y	M	4 • AFD CONF	1295			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	1033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L089			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	1015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1082			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1083			C	
			31	W	T	4 • EXP 1 • OIS 164	1084			C	
			32	W	T	4 • EXP 2 • OIS 174	1085			C	
			33	W	T	4 • TD 1 • OIS 131	1086			C	
			34	W	T	4 • TD 4 • OIS 231	1088			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2270	255	27						PAYLOAD 6 (LEFT)	213	C	V48HFD
			01	W	T	PABX	~~5621~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1286			C	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	1290			C	
			10	Y	M	4 • AFD CONF	1295			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	1033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L009			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	1015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1083			C	
			31	W	T	4 • EXP 1 • OIS 164	1084			C	
			32	W	T	4 • EXP 2 • OIS 174	1085			C	
			33	W	T	4 • TD 1 • OIS 131	1086			C	
			34	W	T	4 • TD 4 • OIS 231	1088			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OID • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM ALB • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2271	255	28						PAYLOAD 6 (RIGHT)	213	C	V48-FD
			01	W	T	PABX	~~5631~~ 5623			C	
			02	W	T	PABX	5620			C	
			03	Y	M	4 • PD	L092			C	
			04	W	T	4 • PD	L092			C	
			05	Y	M	4 • A/G 1	A169			C	
			06	Y	M	4 • A/G 2	1286			D	
			07	Y	M	4 • PAYLOADS	L097			C	
			08	W	T	4 • PAYLOADS	L097			C	
			09	Y	M	4 • FD	1290			C	
			10	Y	M	4 • AFD CONF	1295			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • PAYLOAD • CONF	L091			C	
			14	W	T	4 • PAYLOAD • CONF	L091			C	
			15	Y	M	4 • FAO	L066			C	
			16	Y	M	4 • CREW OPS	L074			C	
			17	Y	M	4 • COMM • OIS 155	1033			C	
			18	Y	M	4 • WEATHER • NET	L035			C	
			19	Y	M	4 • PAYLOAD • DATA	L089			C	
			20	W	T	4 • PAYLOAD • DATA	L089			C	
			21	Y	M	4 • DFE	L106			C	
			22	Y	M	4 • DATA • INTE- • GRATOR	1015			C	
			23	Y	M	4 • OPS PLNR	L072			C	
			24	Y	M	4 • OPS COORD	L081			C	
			25	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			26	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			27	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			28	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			29	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			30	Y	M	4 • SSR 2 • CONF/PE-1 • OIS 161	1083			C	
			31	W	T	4 • EXP 1 • OIS 164	1084			C	
			32	W	T	4 • EXP 2 • OIS 174	1085			C	
			33	W	T	4 • TD 1 • OIS 131	1086			C	
			34	W	T	4 • TD 4 • OIS 231	1008			C	
			35	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			36	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			38	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			39	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			40	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

(PROPOSED)

PAYLOAD COMMAND (252-L,R)

CR____ DATE____ RM____ CSL____ KEYSET____ TYPE____ V. CIRCLE ONE HOR.

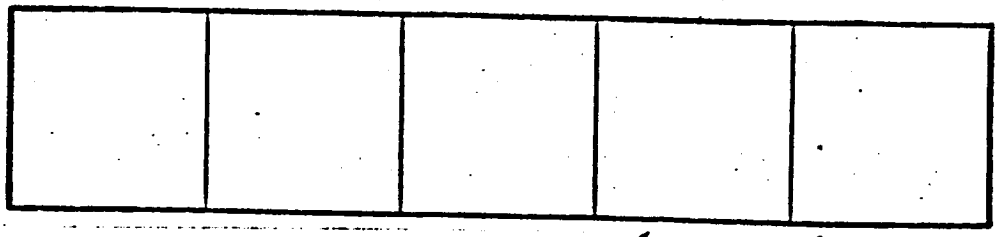
1 PABX	2 PABX	3 SPAN (T)	4 AIG UHF (M)	5 AIG 1 (M)	6 AIG 1 (H)
7 FD (M)	8 AFD CONF (M)	9 AFD CONF (T)	10 COMM-1 (T)	11 AIG 2 (M)	12 AIG 2 (H)
13 PAYLOADS (M)	14 PAYLOADS (T)	15 PIL CONF (M)	16 PIL CONF (T)	17 MOCR CMD (T)	18 LOAD CNTL (T)
19 PIL SYS (M)	20 PIL SYS (T)	21 PIL DATA (M)	22 PIL DATA (T)	23 RTC (M)	24 RTC (T)
25 PD (M)	26 PD (T)	27 SSR DYN 2 (M)	28 SSR DYN 2 (T)	29 INCO (M)	30 INCO (T)
31 USR 1 / USR 2 (T)	32 USR 3 / USR 4 (T)	33 MOCR SYS (T)	34 MOCR DPS/GNC (T)	35 SDP CMD (T)	36 DFE T)
37 PIL MPSR (T)	38 PLBK 1 (M)	39 PLBK 2 (M)	40 EXP-1 (T)	41 SITE COORD (M)	42 DFE PLBK (T)
43 SSR-1 CONF (T)	44 SSR-2 CONF (T)	45 SDP TLM (T)	46 MSN PLNG CONF (T)	47 GC CALL / COMM CNTL (T)	48 DISPLAY (T)

NSC Form 2171 (Sep 86)

CCS POSN	CONS	MD	PBI	CLR	T/H	•••••••••••••••• LOOP LEGEND ••••••••••••••••	LOOP DESIG	••••• POSITION TITLE ••••••	ROOM NUM	REV	KEYSET TYPE
2264	252	27						PAYLOAD 3 (LEFT)	213	C	V48-FD
		01	W	T		PABX	5621			C	
		02	W	T		PABX	5622			C	
		03	Y	M	4	• PAYLOADS	L097			C	
		04	W	T	4	• PAYLOADS	L097			C	
		05	Y	M	4	• A/G 1	A169			C	
		06	Y	M	4	• A/G 2	1206			D	
		07	Y	M	4	• FD	1290			C	
		08	W	T	4	• FD	1290			C	
		09	W	T	4	• AFD CONF	1295			C	
		10	Y	M	4	• INCO	1022			C	
		11	W	T	4	• INCO	1022			C	
		12	Y	M	4	• A/G UHF	1271			C	
		13	Y	M	4	• RTC	L006			C	
		14	W	T	4	• RTC	L006			C	
		15	Y	M	4	• LOAD • CONTROL	L116			C	
		16	W	T	4	• LOAD • CONTROL	L116			C	
		17	Y	M	4	• MOCR • CMD	L014			C	
		18	W	T	4	• MOCR • CMD	L014			C	
		19	Y	M	4	• PAYLOAD • SYSTEMS	L008			C	
		20	W	T	4	• PAYLOAD • SYSTEMS	L008			C	
		21	W	T	4	• MOCR SYS	L079			C	
		22	W	T	4	• SDP CMD	L069			C	
		23	W	T	4	• OPS PLNR	L072			C	
		24	W	T	4	• SSR 1 • CONF/ T/S • OIS 183	1002			C	
		25	Y	M	4	• PAYLOAD • CONF	L091			C	
		26	W	T	4	• PAYLOAD • CONF	L091			C	
		27	Y	M	4	• PAYLOAD • DATA	L089			C	
		28	W	T	4	• PAYLOAD • DATA	L089			C	
		29	W	T	4	• DATA	L070			C	
		30	W	T	4	• SSR 2 • CONF/PE-1 • OIS 181	1003			C	
		31	Y	M	4	• PD	L092			C	
		32	W	T	4	• PD	L092			C	
		33	Y	M	4	• PLBK 1 • STS TD • OIS 131	P048			D	
		34	Y	M	4	• PLBK 2 • ET/SRB TD • OIS 135	1249			C	
		35	Y	M	4	• PLBK 3 • OTD • OIS 232	1250			C	
		36	Y	M	4	• PLBK 4 • ICOM A&B • 214 & 215	1251			C	
		37	Y	M	4	• P/L MPSR • P/L TD • OIS 133	1050			C	
		38	W	T	4	• P/L MPSR • P/L TD • OIS 133	1050			C	
		39	W	T	4	• EXP 1 • OIS 164	1084			C	
		40	W	T	4	• EXP 2 • OIS 174	1085			C	
		41	W	T	4	• TD 1 • OIS 131	1086			C	
		42	W	T	4	• TD 4 • OIS 231	1088			C	
		43	W	T	4	• USER • SUPPORT • ROOM 1	1056			C	
		44	W	T	4	• USER • SUPPORT • ROOM 2	1057			C	
		45	W	T	4	• USER • SUPPORT • ROOM 3	1058			C	
		46	W	T	4	• USER • SUPPORT • ROOM 4	1059			C	
		47	W	T	4	• GC CALL	1129			C	
		48	W	T	4	• DISPLAY	L057			C	

CCS POSN	CONS	MD	PDI	CLR	T/M	•••••••••••••• LOOP LEGEND ••••••••••••••	LOOP DESIG	••••• POSITION TITLE ••••••	ROOM NUM	REV	KEYSET TYPE
2265	252	28						PAYLOAD 3 (RIGHT)	213	C	V48-FD
			01	W	T	PABX	5621			C	
			02	W	T	PABX	5623			C	
			03	Y	M	4 • PAYLOADS	L097			C	
			04	W	T	4 • PAYLOADS	L097			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1206			C	
			07	Y	M	4 • FD	1290			C	
			08	W	T	4 • FD	1290			C	
			09	W	T	4 • AFD CONF	1295			C	
			10	Y	M	4 • INCO	1022			C	
			11	W	T	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • RTC	L006			C	
			14	W	T	4 • RTC	L006			C	
			15	Y	M	4 • LOAD • CONTROL	L116			C	
			16	W	T	4 • LOAD • CONTROL	L116			C	
			17	Y	M	4 • MOCR • CMD	L014			C	
			18	W	T	4 • MOCR • CMD	L014			C	
			19	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			20	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			21	W	T	4 • MOCR SYS	L079			C	
			22	W	T	4 • SDP CMD	L069			C	
			23	W	T	4 • OPS PLNR	L072			C	
			24	W	T	4 • SSR 1 • CONF/ T/S • OIS 183	1082			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	Y	M	4 • PAYLOAD • DATA	L089			C	
			28	W	T	4 • PAYLOAD • DATA	L089			C	
			29	W	T	4 • DATA	L070			C	
			30	W	T	4 • SSR 2 • CONF/PE-1 • OIS 161	1083			C	
			31	Y	M	4 • PD	L092			C	
			32	W	T	4 • PD	L092			C	
			33	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			34	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			35	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			36	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			37	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			38	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			39	W	T	4 • EXP 1 • OIS 164	1084			C	
			40	W	T	4 • EXP 2 • OIS 174	1085			C	
			41	W	T	4 • TD 1 • OIS 131	1086			C	
			42	W	T	4 • TD 4 • OIS 231	1088			C	
			43	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			44	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			45	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

(PROPOSED)



MISSION SCIENTIST (253-L)

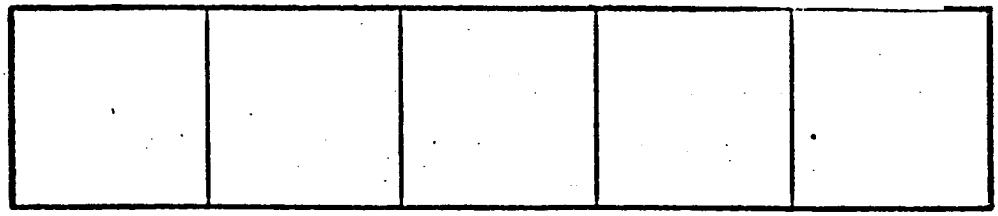
CR _____ DATE _____ RM _____ CSL _____ KEYSET _____ TYPE _____ V. CIRCLE ONE HOR.

1 PABX	2 PABX	3 PAO REL (M)	4 AIG 1 (M)	5 AIG 2 (M)	6 AIG 2 (H)
7 PD (M)	8 PD (T)	9 PAYLOADS (M)	10 PAYLOADS (T)	11 INCO (M)	12 AIG UHF (M)
13 FD (M)	14 AFD CONF (M)	15 P/L SYS (M)	16 P/L SYS (T)	17 MSN PLNG CONF (M)	18 MSN PLNG CONF (T)
19 SPAN (M)	20 SPAN (T)	21 P/L DATA (M)	22 P/L DATA (T)	23 P/L MPSR (M)	24 P/L MPSR (T)
25 P/L CONF (M)	26 P/L CONF (T)	27 OPS PLNR (T)	28 OPS COORD (M)	29 CREW OPS (M)	30 CREW OPS (T)
31 USR 1 (M)	32 USR 1 (T)	33 PLBK 1 (M)	34 PLBK 2 (M)	35 PLBK 3 (M)	36 PLBK 4 (M)
37 USR 2 (M)	38 USR 2 (T)	39 EXP-1 (T)	40 EXP-2 (T)	41 TD-1 (T)	42 TD-4 (T)
43 USR 3 (M)	44 USR 3 (T)	45 USR 4 (M)	46 USR 4 (T)	47 COMM CNTL (T)	48 DISPLAY (T)

NSC Form 2171 (Sep 86)

CCS POSN	CONS	HD	PDI	CLR	T/M	LOOP LEGEND	LOOP DESIG	POSITION TITLE	ROOM NUM	REV	KEYSET TYPE
2266	253	27						PAYLOAD 4 (LEFT)	213	C	V48HFD
			01	W	T	PABX	~~5621~~ 5620			C	
			02	W	T	PABX	5623			C	
			03	Y	M	4 • A/G 1	A169			D	
			04	W	T	4 • A/G 1	1270			C	
			05	Y	M	4 • A/G 2	1206			C	
			06	W	T	4 • A/G 2	1206			C	
			07	Y	M	4 • PD	L092			C	
			08	W	T	4 • PD	L092			C	
			09	Y	M	4 • PAYLOADS	L097			C	
			10	W	T	4 • PAYLOADS	L097			C	
			11	W	T	4 • INCO	1022			C	
			12	W	T	4 • A/G UHF	1271			C	
			13	Y	M	4 • FD	1290			C	
			14	W	T	4 • FD	1290			C	
			15	Y	M	4 • AFD CONF	1295			C	
			16	W	T	4 • AFD CONF	1295			C	
			17	Y	M	4 • FAO	L066			C	
			18	W	T	4 • FAO	L066			C	
			19	Y	M	4 • SPAN	1244			C	
			20	W	T	4 • SPAN	1244			C	
			21	Y	M	4 • SSPO	1110			C	
			22	W	T	4 • SSPO	1110			C	
			23	Y	M	4 • MOCR SYS	L079			C	
			24	Y	M	4 • MOCR • CMD	L014			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	W	T	4 • OPS PLNR	L072			C	
			28	W	T	4 • OPS COORD	L081			C	
			29	W	T	4 • CREW • PROCEED	L082			C	
			30	W	T	4 • CREW OPS	L074			C	
			31	W	T	4 • PAYLOAD • DATA	L089			C	
			32	W	T	4 • PAYLOAD • SYSTEMS	L080			C	
			33	W	T	4 • EXP 1 • OIS 164	1084			C	
			34	W	T	4 • EXP 2 • OIS 174	1085			C	
			35	W	T	4 • TD 1 • OIS 131	1086			C	
			36	W	T	4 • TD 4 • OIS 231	1008			C	
			37	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			38	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			39	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			40	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			44	Y W	M T	4 • USER • SUPPORT • ROOM 2	1057			C	
			45	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • GC CALL	1129			C	
			48	W	T	4 • DISPLAY	L057			C	

(PROPOSED)



POCC DIRECTOR (253-R)

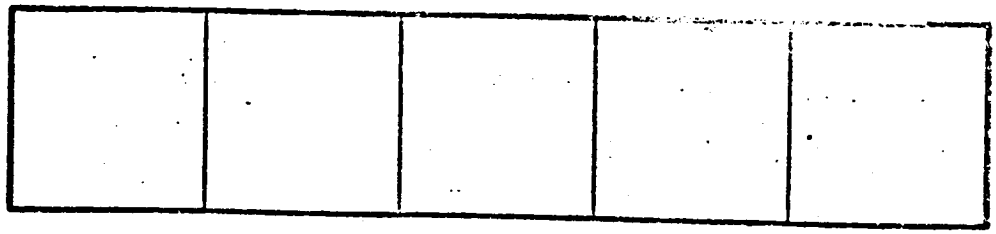
HOR. ONE
V. CIRCLE
TYPE
KEYSET
CSL
RM
DATE
CR

1 PABX	2 PABX	3 AIG 1 (m)	4 AIG 2 (H)	5 AIG 2 (m)	6 AIG 2 (T)
7 PD (m)	8 PD (T)	9 PAYLOADS (m)	10 PAYLOADS (T)	11 INCO (m)	12 A/G UHF (m)
13 FD (m)	14 FD (T)	15 AFD CONF (m)	16 AFD CONF (T)	17 MSN PLNG CONF (m)	18 MSN PLNG CONF (T)
19 SPAN (m)	20 SPAN (T)	21 SSPO (m)	22 SSPO (T)	23 MOCR SYS (m)	24 MOCR CMD (m)
25 P/L CONF (m)	26 P/L CONF (T)	27 OPS PLNR (T)	28 OPS COORD (T)	29 CREW PROCED (T)	30 CREW OPS (T)
31 P/L DATA (m)	32 P/L DATA (T)	33 P/L SYS (m)	34 P/L SYS (T)	35 PLBK 1 (m)	36 PLBK 2 (m)
37 P/L MPSR (m)	38 P/L MPSR (T)	39 EXP-1 (T)	40 EXP-2 (T)	41 TD-1 (T)	42 TD-4 (T)
43 USR 1 (T)	44 USR 2 (T)	45 USR 3 (T)	46 USR 4 (T)	47 GC CALL (T)	48 DISPLAY (T)

HSC Form 2171 (Sep 66)

CCS POSN	CONS	HD	PBI	CLR	T/M	••••••••••••••• LOOP LEGEND •••••••••••••••	LOOP DESIG	••••• POSITION TITLE ••••••	ROOM NUM	REV	KEYSET TYPE
2267	253	28						PAYLOAD 4 (RIGHT)	213	C	V48HFD
			01	W	T	PABX	~~5621~~ 5620			C	
			02	W	T	PABX	~~5623~~ 5622			C	
			03	Y	M	4 • PAO • RELEASE	1252			C	
			04			(BLANK)				D	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1206			C	
			07	Y	M	4 • PD	L092			C	
			08	W	T	4 • PD	L092			C	
			09	Y	M	4 • PAYLOADS	L097			C	
			10	W	T	4 • PAYLOADS	L097			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • FD	1290			C	
			14	Y	M	4 • AFD CONF	1295			C	
			15	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			16	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			17	Y	M	4 • FAO	L066			C	
			18	W	T	4 • FAO	L066			C	
			19	Y	M	4 • SPAN	1244			C	
			20	W	T	4 • SPAN	1244			C	
			21	Y	M	4 • PAYLOAD • DATA	L089			C	
			22	W	T	4 • PAYLOAD • DATA	L089			C	
			23	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			24	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	W	T	4 • OPS PLNR	L072			C	
			28	Y	M	4 • OPS COORD	L081			C	
			29	Y	M	4 • CREW OPS	L074			C	
			30	W	T	4 • CREW OPS	L074			C	
			31	Y	M	4 • USER • SUPPORT • ROOM 1	1058			C	
			32	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			33	W	T	4 • EXP 1 • OIS 164	1084			C	
			34	W	T	4 • EXP 2 • OIS 174	1085			C	
			35	W	T	4 • TD 1 • OIS 131	1086			C	
			36	W	T	4 • TD 4 • OIS 231	1088			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			38	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			39	Y	M	4 • PLOK 1 • STS TD • OIS 131	P048			D	
			40	Y	M	4 • PLOK 2 • ET/SRB TD • OIS 135	1249			C	
			41	Y	M	4 • PLOK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLOK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

(PROPOSED)



SCIENCE PLNR (256-L,R)

CR _____ DATE _____ RM _____ CSL _____ KEYSET _____ TYPE _____ V. CIRCLE HOR. ONE

1 PABX	2 PABX	3 WX NET (m)	4 AIG 1 (m)	5 AIG 2 (m)	6 AIG 2 (H)
7 PD (m)	8 PD (T)	9 PAYLOADS (m)	10 PAYLOADS (T)	11 INCO (m)	12 AIG UHF (m)
13 FD (m)	14 AFD CONF (m)	15 P/L SYS (m)	16 P/L SYS (T)	17 MSN PLNG CONF (m)	18 MSN PLNG CONF (T)
19 SPAN (m)	20 SPAN (T)	21 P/L DATA (m)	22 P/L DATA (T)	23 P/L MPSR (m)	24 P/L MPSR (T)
25 P/L CONF (m)	26 P/L CONF (T)	27 OPS PLNR (T)	28 OPS COORD (m)	29 CREW OPS (m)	30 CREW OPS (T)
31 USR 1 (m)	32 USR 1 (T)	33 PLBK 1 (m)	34 PLBR 2 (m)	35 PLBK 3 (m)	36 PLBK 4 (m)
37 USR 2 (m)	38 USR 2 (T)	39 EXP-1 (T)	40 EXP-2 (T)	41 TD-1 (T)	42 TD-4 (T)
43 USR 3 (m)	44 USR 3 (T)	45 USR 4 (m)	46 USR 4 (T)	47 GC CALL / COMM CNTL (T)	48 DISPLAY (T)

NSC Form 2171 (Sep 66)

CCS POSN	CONS	HD	PDI	CLR	T/H	••••••••••••••• LOOP LEGEND •••••••••••••••	LOOP DESIG	••••• POSITION TITLE •••••	ROOM NUM	REV	KEYSET TYPE
2272	256	27						PAYLOAD 7 (LEFT)	213	C	V48MFD
			01	W	T	PABX	~~5621~~ 5620			C	
			02	W	T	PABX	5623			C	
			03	W	T	4 • WEATHER • NET	L035			C	
			04			(BLANK)				D	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1286			C	
			07	Y	M	4 • PD	L092			C	
			08	W	T	4 • PD	L092			C	
			09	Y	M	4 • PAYLOADS	L097			C	
			10	W	T	4 • PAYLOADS	L097			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • FD	1290			C	
			14	Y	M	4 • AFD CONF	1295			C	
			15	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			16	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			17	Y	M	4 • FAO	L066			C	
			18	W	T	4 • FAO	L066			C	
			19	Y	M	4 • SPAN	1244			C	
			20	W	T	4 • SPAN	1244			C	
			21	Y	M	4 • PAYLOAD • DATA	L089			C	
			22	W	T	4 • PAYLOAD • DATA	L089			C	
			23	Y	M	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			24	W	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	W	T	4 • OPS PLNR	L072			C	
			28	Y	M	4 • OPS COORD	L081			C	
			29	Y	M	4 • CREW OPS	L074			C	
			30	W	T	4 • CREW OPS	L074			C	
			31	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			32	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			33	W	T	4 • EXP 1 • OIS 164	1004			C	
			34	W	T	4 • EXP 2 • OIS 174	1005			C	
			35	W	T	4 • TD 1 • OIS 131	1006			C	
			36	W	T	4 • TD 4 • OIS 231	1008			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			38	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			39	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			40	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • GC CALL	1129			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PDI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2273	255	20						PAYLOAD 7 (RIGHT)	213	C	V48-FD
			01	W	T	PABX	~~5621~~ 5620			C	
			02	W	T	PABX	5623			C	
			03	W	T	4 • WEATHER • NET	L035			C	
			04			(BLANK)				D	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	1206			C	
			07	Y	M	4 • PD	L092			C	
			08	W	T	4 • PD	L092			C	
			09	Y	M	4 • PAYLOADS	L097			C	
			10	W	T	4 • PAYLOADS	L097			C	
			11	Y	M	4 • INCO	1022			C	
			12	Y	M	4 • A/G UHF	1271			C	
			13	Y	M	4 • FD	1290			C	
			14	Y	M	4 • AFD CONF	1295			C	
			15	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			16	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			17	Y	M	4 • FAO	L066			C	
			18	W	T	4 • FAO	L066			C	
			19	Y	M	4 • SPAN	1244			C	
			20	W	T	4 • SPAN	1244			C	
			21	Y	M	4 • PAYLOAD • DATA	L089			C	
			22	W	T	4 • PAYLOAD • DATA	L089			C	
			23	Y	M	4 • P/L HPSR • P/L TD • OIS 133	1050			C	
			24	W	T	4 • P/L HPSR • P/L TD • OIS 133	1050			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	W	T	4 • OPS PLNR	L072			C	
			28	Y	M	4 • OPS COORD	L001			C	
			29	Y	M	4 • CREW OPS	L074			C	
			30	W	T	4 • CREW OPS	L074			C	
			31	Y	M	4 • USER • SUPPORT • ROOM 1	1056			C	
			32	W	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			33	W	T	4 • EXP 1 • OIS 164	1084			C	
			34	W	T	4 • EXP 2 • OIS 174	1085			C	
			35	W	T	4 • TD 1 • OIS 131	1086			C	
			36	W	T	4 • TD 4 • OIS 231	1088			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 2	1057			C	
			38	W	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			39	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			40	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	W	T	4 • COMM • CONTROL	L032			C	
			48	W	T	4 • DISPLAY	L057			C	

EXPERIMENTS (257 - L, R)

CR _____ DATE _____ RM _____ CSL _____ KEYSET _____ TYPE _____ V. CIRCLE ONE HOR.

1 PABX	2 PABX	3 MOCR SYS (m)	4 SDP TLM (T)	5 AIG 1 (m)	6 AIG 2 (m)
7 PD (m)	8 PD (T)	9 PAYLOADS (m)	10 PAYLOADS (T)	11 INCO (m)	12 AIG UHF (m)
13 FD (m)	14 AFD CONF (m)	15 P/L SYS (m)	16 P/L SYS (T)	17 EGIL (m)	18 EE COM/ EGIL (m)
19 DFE (T)	20 DFE PLBK (T)	21 P/L DATA (m)	22 P/L DATA (T)	23 P/L MPSR (m)	24 P/L MPSR (T)
25 P/L CONF (m)	26 P/L CONF (T)	27 INSTR COORD (T)	28 SSR 1 CONF (m)	29 SSR 1 CONF (T)	30 SSR 2 CONF (T)
31 USR 1 (m)	32 USR 1 (T)	33 PLBK 1 (m)	34 PLBK 2 (m)	35 PLBK 3 (m)	36 PLBK 4 (m)
37 USR 2 (m)	38 USR 2 (T)	39 EXP-1 (T)	40 EXP-2 (T)	41 TD-1 (T)	42 TD-4 (T)
43 USR 3 (m)	44 USR 3 (T)	45 USR 4 (m)	46 USR 4 (T)	47 GC CALL / COMM CNTL (T)	48 DISPLAY (T)

NSC Form 2171 (Sep 66)

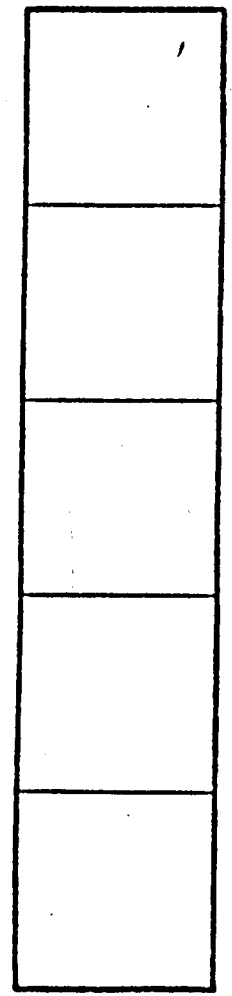
CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE *****	ROOM NUM	REV	KEYSET TYPE
2274	257	27						PAYLOAD 8 (LEFT)	213	C	V48-FD
			01	W	T	PABX	~~5621~~ 5620			C	
			02	W	T	PABX	5623			C	
			03	Y	M	4 • MOCR SYS	L079			C	
			04	W	T	4 • SDP TLM	L125			C	
			05	Y	M	4 • A/G 1	A169			D	
			06	Y	M	4 • A/G 2	I286			C	
			07	Y	M	4 • PD	L092			C	
			08	W	T	4 • PD	L092			C	
			09	Y	M	4 • PAYLOADS	L097			C	
			10	W	T	4 • PAYLOADS	L097			C	
			11	Y	M	4 • INCO	I022			C	
			12	Y	M	4 • A/G UHF	I271			C	
			13	Y	M	4 • FD	I290			C	
			14	Y	M	4 • AFD CONF	I295			C	
			15	Y	M	4 • PAYLOAD • SYSTEMS	L088			C	
			16	W	T	4 • PAYLOAD • SYSTEMS	L088			C	
			17	Y	M	4 • EGIL	L018			C	
			18	Y	M	4 • EECOM/ • EGIL	L020			C	
			19	W	T	4 • DFE	L108			C	
			20	W	T	4 • DFE • PLAYBACK	L090			C	
			21	Y	M	4 • PAYLOAD • DATA	L089			C	
			22	W	T	4 • PAYLOAD • DATA	L089			C	
			23	Y	M	4 • P/L HPSR • P/L TD • OIS 133	I050			C	
			24	W	T	4 • P/L HPSR • P/L TD • OIS 133	I050			C	
			25	Y	M	4 • PAYLOAD • CONF	L091			C	
			26	W	T	4 • PAYLOAD • CONF	L091			C	
			27	W	T	4 • INSTR • COORD	L078			C	
			28	Y	M	4 • SSR 1 • CONF/ T/S • OIS 183	I082			C	
			29	W	T	4 • SSR 1 • CONF/ T/S • OIS 183	I082			C	
			30	W	T	4 • SSR 2 • CONF/PE-1 • OIS 161	I083			C	
			31	Y	M	4 • USER • SUPPORT • ROOM 1	I056			C	
			32	W	T	4 • USER • SUPPORT • ROOM 1	I056			C	
			33	W	T	4 • EXP 1 • OIS 164	I084			C	
			34	W	T	4 • EXP 2 • OIS 174	I085			C	
			35	W	T	4 • TD 1 • OIS 131	I086			C	
			36	W	T	4 • TD 4 • OIS 231	I088			C	
			37	Y	M	4 • USER • SUPPORT • ROOM 2	I057			C	
			38	W	T	4 • USER • SUPPORT • ROOM 2	I057			C	
			39	Y	M	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			40	Y	M	4 • PLBK 2 • ET/SRB TD • OIS 135	I249			C	
			41	Y	M	4 • PLBK 3 • OTD • OIS 232	I250			C	
			42	Y	M	4 • PLBK 4 • ICOM A&B • 214 & 215	I251			C	
			43	Y	M	4 • USER • SUPPORT • ROOM 3	I058			C	
			44	W	T	4 • USER • SUPPORT • ROOM 3	I058			C	
			45	Y	M	4 • USER • SUPPORT • ROOM 4	I059			C	
			46	W	T	4 • USER • SUPPORT • ROOM 4	I059			C	
			47	W	T	4 • GC CALL	I129			C	
			48	W	T	4 • DISPLAY	L057			C	

CCS POSN	CONS	MD	PBI	CLR	T/M	********** LOOP LEGEND **********	LOOP DESIG	***** POSITION TITLE ******	ROOM NUM	REV	KEYSET TYPE
2278	257	28						PAYLOAD 8 (RIGHT)	213	C	V48-FD
			01	H	T	PABX	~~5621~~ 5620			C	
			02	H	T	PABX	5623			C	
			03	Y	H	4 • MOCR SYS	L079			C	
			04	H	T	4 • SDP TLM	L125			C	
			05	Y	H	4 • A/G 1	A169			D	
			06	Y	H	4 • A/G 2	1286			C	
			07	Y	H	4 • PD	L092			C	
			08	H	T	4 • PD	L092			C	
			09	Y	H	4 • PAYLOADS	L097			C	
			10	H	T	4 • PAYLOADS	L097			C	
			11	Y	H	4 • INCO	1022			C	
			12	Y	H	4 • A/G UHF	1271			C	
			13	Y	H	4 • FD	1290			C	
			14	Y	H	4 • AFD CONF	1295			C	
			15	Y	H	4 • PAYLOAD • SYSTEMS	L088			C	
			16	H	T	4 • PAYLOAD • SYSTEMS	L088			C	
			17	Y	H	4 • EGIL	L018			C	
			18	Y	H	4 • EECOM/ • EGIL	L020			C	
			19	H	T	4 • DFE	L106			C	
			20	H	T	4 • DFE • PLAYBACK	L090			C	
			21	Y	H	4 • PAYLOAD • DATA	L089			C	
			22	H	T	4 • PAYLOAD • DATA	L089			C	
			23	Y	H	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			24	H	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			25	Y	H	4 • PAYLOAD • CONF	L091			C	
			26	H	T	4 • PAYLOAD • CONF	L091			C	
			27	H	T	4 • INSTR • COORD	L078			C	
			28	Y	H	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			29	H	T	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			30	H	T	4 • SSR 2 • CONF/PE-1 • OIS 161	1003			C	
			31	Y	H	4 • USER • SUPPORT • ROOM 1	1056			C	
			32	H	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			33	H	T	4 • EXP 1 • OIS 164	1004			C	
			34	H	T	4 • EXP 2 • OIS 174	1005			C	
			35	H	T	4 • TD 1 • OIS 131	1006			C	
			36	H	T	4 • TD 4 • OIS 231	1008			C	
			37	Y	H	4 • USER • SUPPORT • ROOM 2	1057			C	
			38	H	T	4 • USER • SUPPORT • ROOM 2	1057			D	
			39	Y	H	4 • PLBK 1 • STS TD • OIS 131	P048			C	
			40	Y	H	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			41	Y	H	4 • PLBK 3 • OTD • OIS 232	1250			C	
			42	Y	H	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			43	Y	H	4 • USER • SUPPORT • ROOM 3	1058			C	
			44	H	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			45	Y	H	4 • USER • SUPPORT • ROOM 4	1059			C	
			46	H	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			47	H	T	4 • COMM • CONTROL	L032			C	
			48	H	T	4 • DISPLAY	L057			C	

POCC OPAQUE TV

CR_____ DATE_____ RM_____ CSL_____ KEYSET _____ TYPE V. HOR.
CIRCLE ONE

43 PAYLOADS (M)	37 PAYLOADS (T)	31 PD (M)	25 PD (T)	19 P/L MPSR (M)	13 P/L MPSR (T)	7 A/G 1 (M)	1 PABX
44 P/L CONF (M)	38 P/L CONF (T)	32 P/L DATA (M)	26 P/L DATA (T)	20 P/L SYS (M)	14 P/L SYS (T)	8 A/G 2 (M)	2 PABX
45 WX NET (T)	39 USR 1 (T)	33 EXP-1 (T)	27 PLBK 1 (M)	21 SSR 1 CONF (M)	15 SSR 1 CONF (T)	9 A/G UHF (M)	3 FD (M)
46 REPRO (T)	40 USR 2 (T)	34 EXP-2 (T)	28 PLBK 2 (M)	22 EECOM/ EGIL (M)	16 SSR 2 CONF (T)	10 INCO (M)	4 AFD CONF (M)
47 COMM CNTL (T)	41 USR 3 (T)	35 TD-1 (T)	29 PLBK 3 (M)	23 EGIL (M)	17 MOCR CMD (M)	11 MOCR SYS (M)	5 (BLANK)
48 DISPLAY (T)	42 USR 4 (T)	36 TD-4 (T)	30 PLBK 4 (M)	24 FAO (M)	18 CREW OPS (M)	12 CREW PROC (T)	6 OPS PLNR (T)



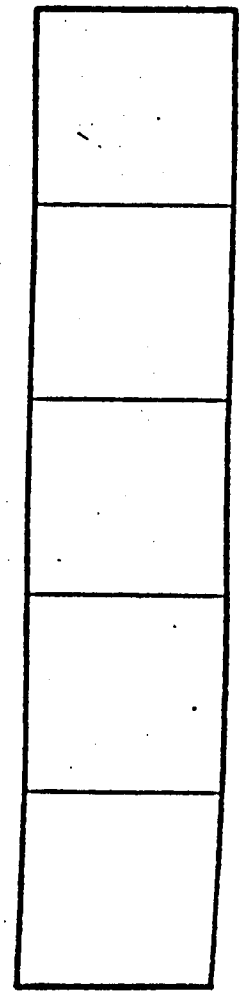
101

CCS POSN	CONS	HD	PBI	CLR	T/H	LOOP LEGEND	LOOP DESIG	POSITION TITLE	ROOM NUM	REV	KEYSET TYPE
2276								POCC OPTV	213	C	R40---
			01	H	T	PABX	~~5631~~ 5625			C	
			02	H	T	PABX	5623			C	
			03	Y	H	4 • FD	1290			C	
			04	Y	H	4 • AFD CONF	1205			C	
			05			(BLANK)				D	
			06	H	T	4 • OPS PLNR	L072			C	
			07	Y	H	4 • A/G 1	A169			D	
			08	Y	H	4 • A/G 2	1286			C	
			09	Y	H	4 • A/G UHF	1271			C	
			10	Y	H	4 • INCO	1022			C	
			11	Y	H	4 • MOCR SYS	L079			C	
			12	H	T	4 • CREW • PROCEED	L002			C	
			13	H	T	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			14	H	T	4 • PAYLOAD • SYSTEMS	L088			C	
			15	H	T	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			16	H	T	4 • SSR 2 • CONF/PE-1 • OIS 161	1003			C	
			17	Y	H	4 • MOCR • CMD	L014			C	
			18	Y	H	4 • CREW OPS	L074			C	
			19	Y	H	4 • P/L MPSR • P/L TD • OIS 133	1050			C	
			20	Y	H	4 • PAYLOAD • SYSTEMS	L088			C	
			21	Y	H	4 • SSR 1 • CONF/ T/S • OIS 183	1002			C	
			22	Y	H	4 • EECOM/ • EGIL	L020			C	
			23	Y	H	4 • EGIL	L018			C	
			24	Y	H	4 • FAO	L066			C	
			25	H	T	4 • PD	L092			C	
			26	H	T	4 • PAYLOAD • DATA	L089			C	
			27	Y	H	4 • PLBK 1 • STS TD • OIS 131	P048			D	
			28	Y	H	4 • PLBK 2 • ET/SRB TD • OIS 135	1249			C	
			29	Y	H	4 • PLBK 3 • OTD • OIS 232	1250			C	
			30	Y	H	4 • PLBK 4 • ICOM A&B • 214 & 215	1251			C	
			31	Y	H	4 • PD	L092			C	
			32	Y	H	4 • PAYLOAD • DATA	L089			C	
			33	H	T	4 • EXP 1 • OIS 164	1084			C	
			34	H	T	4 • EXP 2 • OIS 174	1085			C	
			35	H	T	4 • TD 1 • OIS 131	1086			C	
			36	H	T	4 • TD 4 • OIS 231	1088			C	
			37	H	T	4 • PAYLOADS	L097			C	
			38	H	T	4 • PAYLOAD • CONF	L091			C	
			39	H	T	4 • USER • SUPPORT • ROOM 1	1056			C	
			40	H	T	4 • USER • SUPPORT • ROOM 2	1057			C	
			41	H	T	4 • USER • SUPPORT • ROOM 3	1058			C	
			42	H	T	4 • USER • SUPPORT • ROOM 4	1059			C	
			43	Y	H	4 • PAYLOADS	L097			C	
			44	Y	H	4 • PAYLOAD • CONF	L091			C	
			45	H	T	4 • WEATHER • NET	L035			C	
			46	H	T	4 • REPRO	L182			C	
			47	H	T	4 • COMM • CONTROL	L032			C	
			48	H	T	4 • DISPLAY	L057			C	

PROGRAM MANAGER — TABLE TOP, RM. 213

CR_____ DATE_____ RM_____ CSL_____ KEYSET _____ TYPE V. HOR.
CIRCLE ONE

43 / 37	31 PAYLOADS (m)	25 PAYLOADS (T)	19 PD (m)	13 PD (T)	7 AIG 1 (m)	1 PABX	
44 / 38	32 P/L CONF (m)	26 P/L CONF (T)	20 PL MPSR PL TD (m)	14 PL MPSR PL TD (T)	8 AIG 2 (m)	2 PABX	
45 / 39	33 USR 1 (m)	27 USR 1 (T)	21 EXP 1 (T)	15 PLBK 1 (m)	9 AIG UHF (m)	3 FD (m)	
46 / 40	34 USR 2 (m)	28 USR 2 (T)	22 EXP 2 (T)	16 PLBK 2 (m)	10 FAO (m)	4 AFD CONF (m)	
47 / 41	35 USR 3 (m)	29 USR 3 (T)	23 TD-1 (T)	17 PLBK 3 (m)	11 SSPO (m)	5 SSPO (T)	
48 / 42	36 USR 4 (m)	30 USR 4 (T)	24 TD-4 (T)	18 PLBK 4 (m)	12 SPAN (m)	6 SPAN (T)	



103

05-25-77 CPT REQUIREMENTS INPUT FORM

MCC CONFIGURATION CONTROL DATA PACK ACRONYM CH6/PAYLOADS

'COMMUNICATIONS KEYSETS INPUT REQUIREMENTS FORM'

ROOM NO. 213 CCS POSITION: _____

CONSOLE NO. _____ MODULE LOCATION: _____

KEYSET TITLE PROGRAM MNGR KEYSET TYPE: _____

PBI LOC	CLR	T/M	LEGEND	LOOP DESIG
01	W	T	PABX	5L20
02	W	T	PABX	5B23
03	Y	M	FD	I290
04	Y	M	AFD CONF	I295
05	W	T	SSPD	I110
06	W	T	SPAN	I244
07	Y	M	AIG 1	I270
08	Y	M	AIG 2	I286
09	Y	M	AIG UHF	I271
10	Y	M	MSN PLNG CONF	L066
11	Y	M	SSPD	I110
12	Y	M	SPAN	I244
13	W	T	PD	L092
14	W	T	PL MPSR PL TD OIS 133	I050
15	Y	M	PLBK 1 STS TD OIS 131	I119
16	Y	M	PLBK 2 ET/SRB TD OIS 135	I120
17	Y	M	PLBK 3 OTD/OTC OIS 132	I121
18	Y	M	PLBK 4 ICOM ATB OIS 214	I123
19	Y	M	PD	L092
20	Y	M	PL MPSR PL TD OIS 133	I050
21	W	T	EXP 1 OIS 164	I084
22	W	T	EXP 2 OIS 174	I085
23	W	T	TD 1 OIS 131	I086
24	W	T	TD 4 OIS 231	I088
25	W	T	PAYLOADS	L097
26	W	T	PAYLOAD CONF	L091
27	W	T	USER ROOM 1	I056
28	W	T	USER ROOM 2	I057
29	W	T	USER ROOM 3	I058
30	W	T	USER ROOM 4	I059
31	Y	M	PAYLOADS	L097
32	Y	M	PAYLOAD CONF	L091
33	Y	M	USER ROOM 1	I056
34	Y	M	USER ROOM 2	I057
35	Y	M	USER ROOM 3	I058
36	Y	M	USER ROOM 4	I059
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				

POCC VIEWING ROOM

CR_____ DATE_____ RM_____ CSL_____ KEYSET _____ TYPE V. HOR.
CIRCLE ONE

43	37	31 PAYLOADS (m)	25 PD (m)	19 FD (m)	13 AFD CONF (m)	7 A/G 1 (m)	1 A/G 2 (m)
44	38	32 P/L CONF (m)	26 USR 1 (m)	20 SPAN (m)	14 MOCR CMD (m)	8 INCO (m)	2 A/G UHF (m)
45	39	33 P/L DATA (m)	27 USR 2 (m)	21 FAO (m)	15 MOCR DPS/GNC (m)	9 EXP 1 (m)	3 PLBK 1 (m)
46	40	34 P/L SYS (m)	28 USR 3 (m)	22 CREW OPS (m)	16 MOCR PROP (m)	10 EXP 2 (m)	4 PLBK 2 (m)
47	41	35 PL MPSR PL TD (m)	29 USR 4 (m)	23 (BLANK)	17 MOCR DYN (m)	11 TD-1 (m)	5 PLBK 3 (m)
48	42	36 (BLANK)	30 (BLANK)	24 (BLANK)	18 (BLANK)	12 TD-4 (m)	6 PLBK 4 (m)

105

NSC Form 2171 (Sep 66)

03-25-77 CPT REQUIREMENTS INPUT FORM
MCC CONFIGURATION CONTROL DATA PACK ACRONYM CHG/PAYLOADS

'COMMUNICATIONS KEYSETS INPUT REQUIREMENTS FORM'

ROOM NO. 232 CCS POSITION: ____
CONSOLE NO. ____ MODULE LOCATION: ____
KEYSET TITLE POCC VIEWING ROOM KEYSET TYPE: ____

PBI LOC	CLR	T/M	LEGEND	LOOP DESIG
01			(BLANK)	
02	Y	M	P/L MPSR PIL TD	I050
03	Y	M	PAYLOAD SYS	L088
04	Y	M	PAYLOAD DATA	L089
05	Y	M	PAYLOAD CONF	L091
06	Y	M	PAYLOADS	L097
07			(BLANK)	
08	Y	M	USER SUPPORT ROOM 4	I059
09	Y	M	USER SUPPORT ROOM 3	I058
10	Y	M	USER SUPPORT ROOM 2	I057
11	Y	M	USER SUPPORT ROOM 1	I056
12	Y	M	PD	L092
13			(BLANK)	
14			(BLANK)	
15	Y	M	CREW OPS	L074
16	Y	M	MSN PLNG CONF	L066
17	Y	M	S-PAN	I244
18	Y	M	FD	I290
19			(BLANK)	
20	Y	M	MOCR DYN	L077
21	Y	M	MOCR PROP	L076
22	Y	M	MOCR DPS/GNC	L015
23	Y	M	MOCR CMD	L014
24	Y	M	AFD CONF	I295
25	Y	M	TD 4 OIS 231	I088
26	Y	M	TD 1 OIS 131	I086
27	Y	M	EXP 2 OIS 174	I085
28	Y	M	EXP 1	I084
29	Y	M	INCO	I022
30	Y	M	AIG 1	I270
31	Y	M	PLBK 4	I123
32	Y	M	PLBK 3	I121
33	Y	M	PLBK 2	I120
34	Y	M	PLBK 1	I119
35	Y	M	AIG UHF	I271
36	Y	M	AIG 2	I296
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				

SECTION 10
MISCELLANEOUS NON-CONSOLE DISPLAY/CONTROL DEVICES

(TBD)

SECTION 11
LEVEL A, B, AND C REQUIREMENTS

The Statement of Requirements (SR's) in this section have been submitted for OSTA-1.

1. GSR-397: Real-Time Commands (RTC's) for payloads
2. GSR-456: Installation of doors in the POCC
3. GSR-530: Relocation of SMEK module
4. GSR-~~(TBD)~~ 497: POCC DTE displays
5. GSR-(TBD): THRIFT requirements

CH-78-156	SR	NO. GSR-397	REVISION
		DATE May 16, 1978	

TO: FS/Chief, Ground Data Systems Division ATTN: FS5/Fred H. Wrinkle

SUBJECT: Real-Time Commands (RTC's) for Payloads	REQUIRED OPERATIONAL DATE OSTA-1 Mission/OFT-2
	PRIORITY

Background:

The number of RTC's (75 for storage and uplink) baseline in the OFT Level A documentation is insufficient to support the payload command and control function for the OSTA-1 mission.

Reference:

Level A OFT Requirements - Section 10.4.3.4.1

Requirement:

The MCC shall be capable of storing and executing 250 payload RTC's for the OSTA-1 mission. The RTC's will be premission defined in the Orbiter format. Command verification will be accomplished by monitoring payload system data and normal MCC orbiter command verification processing. No special processing is required.

CONCURRENCE:

Mission Manager

					CH

CH6-78-120 **SR**	NO. GSR-456	REVISION
	DATE February 12, 1979	
TO: FS/Chief, Ground Data Systems Division	ATTN: FS2/K. Ramke	
SUBJECT: Installation of Doors in the POCC	REQUIRED OPERATIONAL DATE OFT-2	
	PRIORITY	

Background:

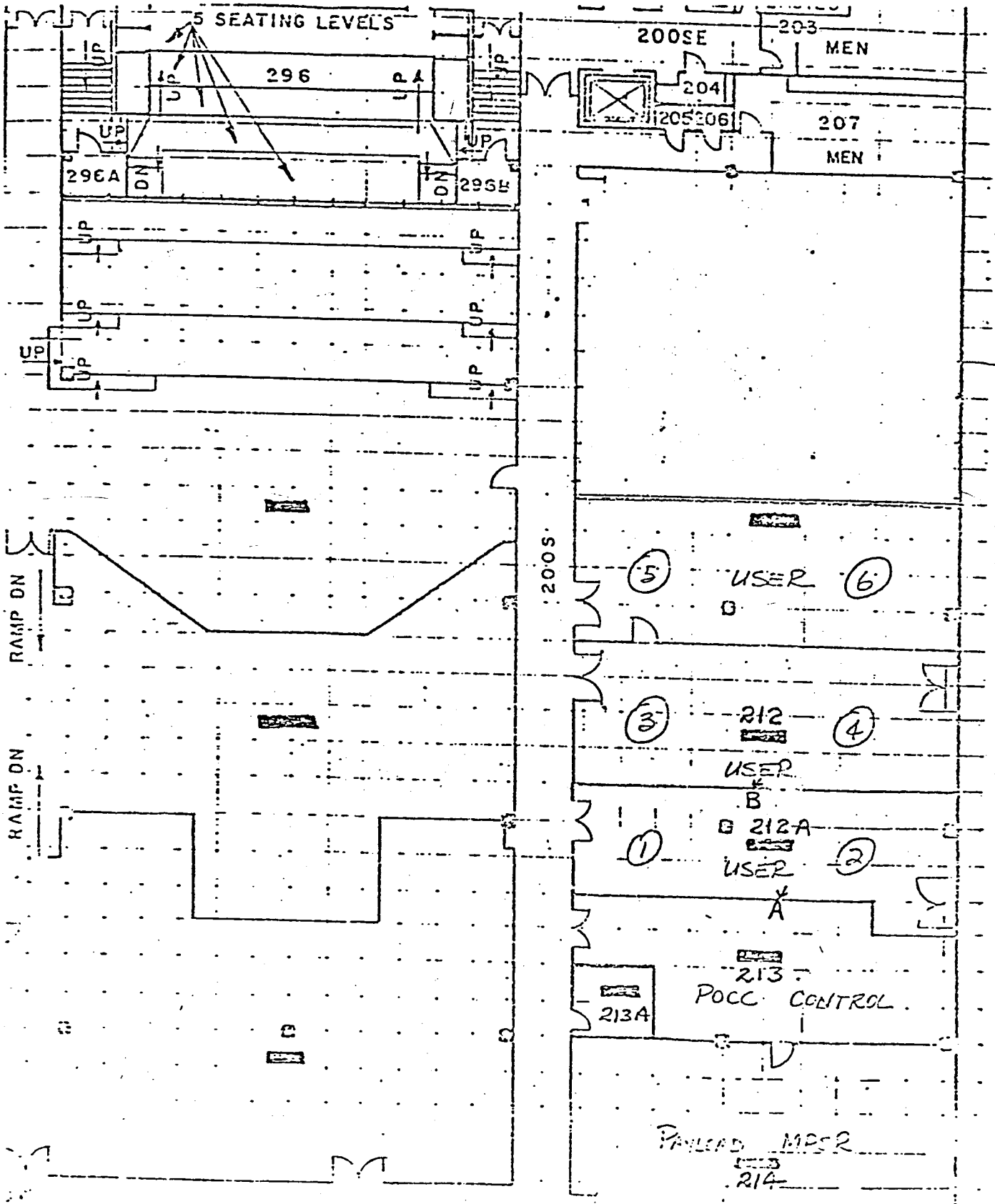
Quick and easy access is required between the Payload Control Room and the User Rooms. Presently, the only access to the User Rooms from the Payload Control Room is via the hallway which is not conducive to good operations. P-tubes are not available in all User Rooms for the easy transfer of information.

Requirement:

Install doors as indicated on the enclosed layout at points A and B. the doors are to open into rooms 212A and 212.

PREPARED BY: CH63/Mason Hagan		APPROVED: (DIVISION CHIEF) Charles S. Harlan				
Concurrence:	CB X	CC X	CF	CG X	CH	
APPROVED: (Director of Flight Operations)						

JSC Form 1085 (Rev Aug 76) NASA-JSC


5 SEATING LEVELS
296
296A
295B
UP
DN
200SE
203
MEN
204
205
206
207
MEN
200S
5
USER
6
RAMP DN
RAMP DN
3
212
4
USER
B
212A
1
USER
2
A
213
POCC CONTROL
213A
PAYLOAD MPSR
214

CH6-79-214	SR	NO. GSR-530	REVISION
		DATE October 10, 1979	
TO: FS/Chief, Ground Data Systems Division	ATTN: FS2/D. N. Hogg		
SUBJECT: Relocation of SMEK Module		REQUIRED OPERATIONAL DATE STS-2	
		PRIORITY	

Background:

Current configuration of the JSC POCC consoles provides one Summary Message Enable Keyboard (SMEK) module located in User Support Room 1. Evaluation of operating procedures indicate that a single point of contact is needed to provide coordination and control of all POCC SMEK requirements. This point of control should be located in the Payload Control Room.

Requirement:

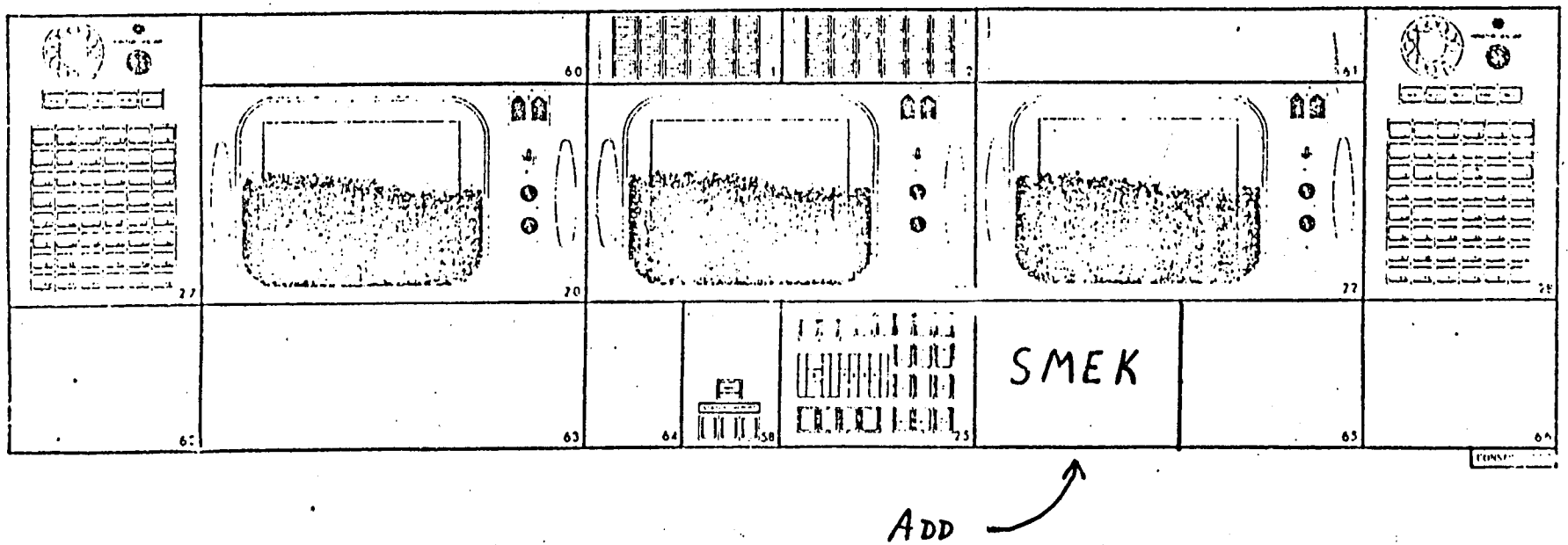
Move the SMEK module from console 250 (PAYLOAD 1) to console 257 (PAYLOAD 8).

(See enclosure)

PREPARED BY: CH63/J. E. Wallace	APPROVED: (DIVISION CHIEF) Charles S. Harlan OCT 9 1979				
Concurrence:	CB X	CC X	CF X	CG X	CH X
APPROVED: (Director of Flight Operations)					

LOC	DESCRIPTION	TYPE	NOTE	LOC	DESCRIPTION	TYPE
01	EVENT INDICATOR	36E		58	STATUS REPORT	4CE2
02	EVENT INDICATOR	36E		60	BLANK PANEL	D11/8
20	TV MONITOR 14 PRECISION	M9		61	BLANK PANEL	D11/8
21	TV MONITOR 14 PRECISION	M9		62	BLANK PANEL	D11/14
22	TV MONITOR 14 PRECISION	M9		63	BLANK PANEL	D11/16
25	MANUAL SELECT KEYBOARD	MSK3A		64	BLANK PANEL	D11/13
27	VOICE COMM POSITION-2274	V48		65	BLANK PANEL	D11/16
28	VOICE COMM POSITION-2275	V48		66	BLANK PANEL	D11/14

Enclosure 113



PAYLOAD 8
CONSOLE NO. 257
ROOM NO. 213

CH6-79-101 SR	NO. GSR-497	REVISION
	DATE MAY 2 1979	
TO: FS/Chief, Ground Data Systems Division ATTN: FS4/G. E. Peter		
SUBJECT: OSTA-1 Displays	REQUIRED OPERATIONAL DATE Prior to OFT-2 Simulations	
	PRIORITY	

This SR contains DTE displays to support the OSTA-1 payload currently manifested for STS-2. The displays are as follows:

MSK	TITLE	SMEK
3320	Payload Summary	
3321	Exp. History 1	062
3322	Exp. History 2	062
3323	SIR-A	
3324	SIR-A History 1	062
3325	SIR-A History 2	062

CONCURRENCE:

CG Flight 5/2/79

Mission Manager

PREPARED BY: CH63/B. J. Dunbar		APPROVED: (DIVISION CHIEF) Charles S. Harlan MAY 1 1979			
Concurrence:	CB	CC	CF	CG	CH
APPROVED: (Director of Flight Operations)					

JSC Form 1295 (Rev Aug 76) NASA-JSC

F/V /000 PAYLOAD SUMMARY 3320

OGMT 000:00:00:00 OMET 000:00:00:00 SITE 000 OI 000 00 GN 000 00
RGMT 000:00:00:00 SM 000 00 BF 000 00

FILE

K5 PWR	000
K6 HTR	000

MAPS

K2 PWR	000
W/B	000
OPR	000

OCE

K3 PWR	000
TOT CUR	00.0 A
DATA DC	000
SCNR DC	000
SCNR AC	000
SCNR AC CUR	0.00 A
DOOR	00
SCAN	000
CH 1 VIDEO	000
PCM	000
PCM SYNC	000
MEA ELEC T	±000 °F
MEA BASE T	±000 °F
SCNR BASE T	±000 °F

SIR-A

K8 PWR	000
RAD PWR	000
RAD OP PWR	000
XMTR	000
T ADV	000
FILM MTN	0000
CAL	000
ESG	0000
GAIN	000
STC	000

SMIRR

K4 PWR	000
COVER OP/CL	0 0
MDM AUTO CMD	0
MODE	000
CAL	000
DET TEMP	0000
FLTR WHL	0000
CAMERA	000
CAM HOU P	0000

IN BUS	00.0	VDC
SBY CUR	0.00	A
OPR CUR	00.0	A
XMTR FWD	0000	W
RFL	0000	W
FILM TEMP	±000	°F
PRF	0	
GAIN LVL	00	db
STC POS	00	

PL RECORDER

SPEED	0
MODE	0000
MOTION	0000

F/V /000 EXP HISTORY 1 3321

OMET 000:00:00:00 OI 000 00 GN 000 00 SM 000 00 BF 000 00 PAGE 1

			LOW	HIGH
SITE		000		
OCE				
X1049 K3 PWR		000		
C0097 TOT CUR	AMPS	00.0		
X0080 DATA DC		000		
X0081 SCNR DC		000		
X0082 SCNR AC		000		
C0096 SCNR CUR	AMPS	0.00		
X0075 DOOR		00		
X0076 SCAN		000		
X0077 CH 1 VIDEO		000		
X0078 PCM		000		
X0079 PCM SYNC		000		
T0092 MEA ELEC T	°F	±000		
T0091 MEA BASE T	°F	±000		
T0090 SCNR BASE T	°F	±000		
SMIRR				
X1052 K4 PWR		000		
X0118 COVER OP		00		
X0119 COVER CL		00		
K0105 MDM AUTO CMD		0		
X0120 MODE		000		
X0117 CAL		000		
X0116 DET TEMP		0000		
X0115 FILT WHL		0000		
X0122 CAMERA		000		
X0121 CAM MOU P		0000		
MAPS				
X1046 K2 PWR		000		
X0060 W/B		000		
X0061 OPR		000		
P/L REC				
SPEED		0		
MODE		0000		
MOTION		0000		
OGMT D:H		000:00		
:M:S		:00:00		
RGMT D:H		000:00		
:M:S		:00:00		

F/V /000 EXP HISTORY 1 3322

OMET 000:00:00:00 OI 000 00 GN 000 00 SM 000 00 BF 000 00 PAGE 2

	SITE	000
DCE		
X1049 K3 PWR		000
C0097 TOT CUR	AMPS	00.0
X0080 DATA DC		000
X0081 SCNR DC		000
X0082 SCNR AC		000
C0096 SCNR CUR	AMPS	0.00
X0075 DOOR		00
X0076 SCAN		000
X0077 CH 1 VIDEO		000
X0078 PCM		000
X0079 PCM SYNC		000
T0092 MEA ELEC T	°F	±000
T0091 MEA BASE T.	°F	±000
T0090 SCNR BASE T	°F	±000
SMIRR		
X1052 K4 PWR		000
X0118 COVER OP		00
X0119 COVER CL		00
K0105 MDM AUTO CMD		0
X0120 MODE		000
X0117 CAL		000
X0116 DET TEMP		0000
X0115 FILT WHL		0000
X0122 CAMERA		000
X0121 CAM HOU P		0000
MAPS		
X1046 K2 PWR		000
X0060 W/B		000
X0061 OPR		000
P/L REC		
SPEED		0
MODE		0000
MOTION		0000
OGMT D:H		000:00
:M:S		:00:00
RGMT D:H		000:00
:M:S		:00:00

F/V /000 SIR-A 3323

OGMT 000:00:00:00 OMET 000:00:00:00 SITE 000 OI 000 00 GN 000 00
RGMT 000:00:00:00 SM 000 00 BF 000 00

K8 PWR	000	IN BUS	00.0	VDC	
RAD PWR	000				
RAD OP PWR	000	AMPS			XMTR PWR
XMTR	000	SBY	0.00		FWD 0000 W
T ADV	000	OPR	00.0		RFL 0000 W
		P9	0.0		
OPT REC		P13	0.0		
OPR	000	P14	0.0		TEMPS °F
SWP	000				FILM ±000
ADV	000				OPT REC ±000
FILM MTN	0000	REMAIN	0000	FT	RCVR ±000
					F/R PWR ±000
MODE					PA A ±000
ESG	0000	PRF	0		PA B ±000
GAIN	000	GAIN LVL	00	db	PA C ±000
STC	000	STC POS	00		BASE ±000
CAL	000	CAL LVL	00.0	VDC	
		INT ECHO	00	MW	
MUX	0	VIDEO	±00	dbMW	

ADD 00000000000

F/V - /000
OMET 000:00:00:00

SIR-A HISTORY 1

3324

OI 000 00 GN 000 00 SM 000 00 BF 000 00 PAGE 1

			LOW	HIGH
	SITE	000		
X1051	RAD PWR	000		
X1052	RAD OP PWR	000		
X1053	XMTR	000		
X1058	T ADV	000		
V0217	IN BUS	VDC 00.0		
C0209	SBY	AMPS 0.00		
C0210	OPR	AMPS 00.0		
C0205	P9	AMPS 0.0		
C0207	P13	AMPS 0.0		
C0208	P14	AMPS 0.0		
E0201	XMTR RFL	W 0000		
E0202	XMTR RFL	W 0000		
X0154	O/R OPR	000		
X0155	O/R SWP	000		
X0156	O/R ADV	000		
X0157	O/R F MTN	000		
H0239	FILM REM	FT 0000		
E0200	INT ECHO	MW 00		
C0206	VIDEO	dbMW ±00		
X0174	ESG	0000		
U0190	PRF	0		
X0165	GAIN	000		
U0191	GAIN LVL	db 00		
X0172	STC	000		
D0192	STC POS	00		
X0173	CAL	000		
V0216	CAL LVL	VDC 00.0		
T0226	FILM	°F ±000		
T0228	OPT REC T	°F ±000		
T0222	RCVR T	°F ±000		
T0221	F/R PWR T	°F ±000		
T0223	PA A T	°F ±000		
T0224	PA B T	°F ±000		
T0225	PA C T	°F ±000		
T0227	BASE T	°F ±000		
	OGMT D:H	000:00		
	:M:S	:00:00		
	RGMT D:H	000:00		
	:M:S	:00:00		

F/V /000 SIR-A HISTORY 1 3325

OMET 000:00:00:00 OI 000 00 GN 000 00 SM 000 00 BF 000 00 PAGE 2

		SITE	000.						
X1051	RAD PWR		000						
X1052	RAD OP PWR		000						
X1053	XMTR		000						
X1058	T ADV		000						
V0217	IN BUS	VDC	00.0						
C0209	SBY	AMPS	0.00						
C0210	OPR	AMPS	00.0						
C0205	P9	AMPS	0.0						
C0207	P13	AMPS	0.0						
C0208	P14	AMPS	0.0						
E0201	XMTR RFL	W	0000						
E0202	XMTR RFL	W	0000						
X0154	O/R OPR		000						
X0155	O/R SWP		000						
X0156	O/R ADV		000						
X0157	O/R F MTN		000						
H0239	FILM REM	FT	0000						
E0200	INT ECHO	MW	00						
C0206	VIDEO	dbMW	±00						
X0174	ESG		00 00						
U0190	PRF		0						
X0165	GAIN		000						
U0191	GAIN LVL	db	00						
X0172	STC		000						
D0192	STC POS		00						
X0173	CAL		000						
V0216	CAL LVL	VDC	00.0						
T0226	FILM	°F	±000						
T0228	OPT REC T	°F	±000						
T0222	RCVR T	°F	±000						
T0221	F/R PWR T	°F	±000						
T0223	PA A T	°F	±000						
T0224	PA B T	°F	±000						
T0225	PA C T	°F	±000						
T0227	BASE T	°F	±000						
		OGMT D:H	000:00						
		:M:S	:00:00						
		RGMT D:H	000:00						
		:M:S	:00:00						

SECTION 12
USER-SUPPLIED GROUND SUPPORT EQUIPMENT

The information in this section indicates the user Ground Support Equipment (GSE) that will be installed in the POCC for OSTA-1.

(TBD)

DISTRIBUTION LIST FOR PAYLOAD INTEGRATION PLAN
JSC-14015 COMPLETED ANNEX NO. 5

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